# 2017 HIGH SCHOOL

## SUMMER INTERNSHIP

## PROGRAM





# HIGH SCHOOL SUMMER INTERNSHIP PROGRAM

The New York City Department of Design and Construction (DDC), in partnership with the NYC Department of Youth and Community Development (NYC DYCD), offers a six-week summer internship for talented NYC high school students to work full-time in house at the Department of Design and Construction. The High School Summer Internship Program is designed for students interested in pursuing careers in architecture, engineering, building trades, public administration, business administration or information technology. The program is structured to enable students to gain exposure to the many careers in the built environment and to learn about what it takes to build NYC. It is a unique opportunity to prepare students for the growing demands of the job market.

2017 is the third year of DDC's High School Summer Internship Program. Each intern is assigned a mentor from a DDC division, including Administration, Architecture & Engineering, Community Partnerships and STEAM Initiatives, Infrastructure, Office of the Chief Architect, Program Management, and Public Buildings.

As part of the program, interns attend weekly educational workshops that discuss career paths in architecture, engineering and construction, college readiness, introduction to 3D modeling, interview skills, resume writing, networking, college application process, and financial aid. Interns also visit various DDC construction projects, where design and construction professionals lead tours and provide a behind-the-scenes introduction to the work of NY DDC.

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The NYC DDC Community Partnerships and STEAM Initiatives was created in 2014 to establish a diverse and inclusive pipeline for New York City's youth to engage in architecture, engineering, and construction (AEC) industries. The agency also hosts a summer internship program for college students, a middle school summer enrichment program, as well as numerous educational programs. Overall, DDC STEAM has served over 1,500 students since its inception.

## ANA BARRIO

## Department of Design and Construction Acting Commissioner

Dear High School Summer Interns,

I would like to congratulate you on the successful completion of your 2017 High School Summer Internship Program at the New York City Department of Design and Construction. This is the third year DDC has partnered with the Department of Youth and Community Development (DYCD), and the Administration for Children Services (ACS) to provide high school students with the opportunity to intern at DDC. This partnership was created in 2014 to encourage students to pursue professional careers in science, technology, engineering, architecture/art, and mathematics, as well as to introduce students to various careers within the field of the built environment.

I am truly proud of all that you have accomplished this summer. You have been a tremendous asset to our agency. You were committed to assisting DDC professionals in various divisions including Infrastructure, Public Buildings, Program Management, Office of the Chief Architect, Administration, and Human Resources. Your eagerness to complete your assignments contributed greatly to the agency.

I hope you gained the tools to enhance your knowledge of the professional and personal paths that can contribute to technical careers at DDC. You had the opportunity to hear from DDC staff members about their professional and educational experiences, and from DDC college interns about the college application, financial aid process and the transition from high school to college. You were also able to practice essential interview skills, effective networking and learn concepts of 3D design.

I am confident that you will take what you have learned and continue to apply it as you pursue opportunities within your fields of interest, either here at DDC or elsewhere.

Congratulations again to the High School Intern Class of 2017! We will miss your enthusiasm, and wish you the very best.

All the Best,

Ana Barrio

**Acting Commissioner** 

In Basin





## LILLIAN "LEE" LLAMBELIS

DDC Community Partnerships + STEAM Initiatives
Deputy Commissioner

To Our High School Interns:

This is the third year of the NYC Department of Design and Construction's High School Summer Internship program. Congratulations on having successfully completed the program. Over the past six weeks you have been working side by side with wonderful supervisors, individuals who are true leaders in the fields of Architecture, Construction, and Engineering. They have shared their expertise and have served as mentors to each of you. They are incredibly proud of the dedication and passion you have demonstrated throughout the program and of all your hard work. We have watched you grow, and develop over the course of the summer and it has been an amazing experience. I'm so very proud of you.

Our goal was to expose you to all that it takes to build NYC. We did that through educational workshops, site visits mentorship. Our lofty goals were all met. Among other things, you have learned how DDC builds New York City's civil facilities and infrastructure, how to use an architecture ruler, analyze blueprints, and use Sketch-Up to create 3 D renderings. Along the way you have developed interviewing and networking skills. Your passion, skills and talent will prepare you for many future professional and educational opportunities.

This has been a wonderful experience for us all. I hope that you will take advantage of the many opportunities available to you at DDC and throughout NYC. You should be proud of what you have accomplished. It has been an honor to work with all of you.

On behalf of the DDC STEAM team, we wish you the best of luck in your future endeavors.

Warmest best wishes,

Lillian "Lee" Llambelis

**Deputy Commissioner** 







Elizabeth Akom Wiredu

High School For Health Professions & Human Services

Public Buildings | Architecture and Engineering I am a rising senior at The High School for Health Professions & Human Services. Growing up in my Ghanaian family household, I have been told that a career in medicine is the most successful. In high school, I even took a three year medical assisting class and became a certified medical assistant. My parents encouraged me to become a doctor or a nurse; however, over time, I realized that I am not passionate about pursing a medical career. During my summer in the DDC High School Summer Internship Program, I was assigned to the Public Buildings Division Architecture and Engineering Unit, and had an opportunity to learn about architectural aspects such as plans, sections, and building designs. This internship greatly increased my interest in art and design and solidified my passion to pursue architecture. I hope to be able to help communities in a different way, by utilizing my interest in art and design to create residential homes. It would give me the opportunity to offer people a chance to build a life with their families in a place that they would love forever.



Keaira Arthur

Valley Stream South High School

Administration | ACCO

I am a rising junior at Valley Stream South High School. As a student, there are many daily, time consuming, tasks that I must complete, however my free time is usually spent reading up on new and upcoming technology, fashion, or music trends. It is important to keep up with today's culture because there are many significant factors affecting the direction of this generation. Recently, I've been working to create a positive platform to inspire and encourage my peers. Social media is a source of all kinds of energy and I want to create content that will be positively influencing. I am passionate about STEAM because I believe that it is the outlet to an exceptional future. There are so many opportunities in this ever expanding field. Many are unaware, such as I was, of the countless career choices, rewarding accomplishments, and how small contributions can make a huge difference in a large project or a breakthrough in future innovations. I enjoy STEAM because problem solving is important for growth. My favorite subject is math and breaking down numbers or solving issues is a skill I enjoy building upon. Also, I took a coding course at Hofstra University and it was a fulfilling experience. When learning a new computer language there are endless routes that one can take to reach a preferred outcome. During the DDC High School Summer Internship Program I was assigned to the ACCO unit, working under Ms. Lorraine Holley. The whole contract team was extremely patient, compassionate and had endless information to share with me. I can now say that I know most of the ins and outs of the bidding process. I was able to attend a bid and a pre-bid conference. I am forever indebted to all who have made this internship a memorable one. My ultimate career goal is to become an IT Director. This internship was a very eye opening experience that gave me the opportunity to expand my interests into other career paths.





Peter Beltrami

Kingston High School

Infrastructure | Design 2

I am currently attending Kingston High School and plan on applying to college within New York City. Once enrolled, I would like to pursue a degree in Business. During my High School Summer Internship Program at DDC, I was assigned to the Infrastructure Division, where I had the opportunity to learn about the history of the agency, assist DDC staff members with project management tasks, and even learn how to read blueprints. Although my work was primarily focused on architecture and engineering, I am now more knowledgeable about the various moving parts that contribute to the operations of a city agency. I am very grateful for having been a part of such a wonderful experience!



Brianna Bernard

High School for Environmental
Studies

Intergovernmental and Community
Affairs

I am a rising senior at the High School for Environmental Studies. I am extremely passionate about the various fields within S.T.E.A.M. because it allows me to be very hands-on. This past year I took a Physics course - solving equations and observing demonstrations involving accelerations and natural occurrences amazed me. I wish to pursue a PhD in Physics with the goal of becoming a physics professor. I want to be able to share my interest with the younger generation that will help shape the future of S.T.E.A.M. During my time here at the DDC High School Summer Internship Program, I was assigned to the Office of Community Outreach and Notification (OCON), which handles the delivery of information regarding the many construction projects that DDC manages in the community. I have learned about the many benefits stemming from new DDC construction projects, completed project reports to notify contractors about the surrounding neighborhoods, and experienced how DDC aims to make the city a better place to live. I am truly grateful to have had the opportunity to be a part of the DDC family this summer!



Patrick Biesty

Leon M. Goldstein High School for the Sciences

Program Management | Information Technology Services I am a rising senior at the Leon M. Goldstein High School. During my freshman year, I joined the Robotics team, where I developed an interest in engineering. Now, I am the president of the Robotics Club. During the last 3 years in the club I learned a great deal about mechanical engineering. However, I never fully understood what the coding team did until I was exposed to S.T.E.A.M. Having a general knowledge of coding language has allowed me to become a more well-rounded president for the club. While interning at DDC, I was assigned to the Information Technology Services unit where I was able to learn more about another type of engineering. This unit is crucial to DDC because they manage the agencies technology needs. I am very grateful for this internship; it has been a wonderful opportunity especially because I am interested in becoming an engineer in the future.



Essience Cheeks

William Cullen Bryant High School

Infrastructure | Program

Administration

I am a rising senior at Queens Academy High School. My goal is to complete college with a concentration in law. I am very grateful for the opportunity to have participated in the DDC High School Summer Internship Program. I was introduced to various careers within the fields of Science, Technology, Engineering, Architecture/Art, and Math, specifically the built environment professions. During my summer with DDC, I was assigned to the Infrastructure Division, where I worked with DDC staff members and learned about the agency's work to improve the lives of the New York City community. I also had the opportunity to visit construction projects DDC manages, such as the Build It Back Program in New Dorp, Staten Island. It was an eye opening experience, as I had the chance to see residential houses that construction workers are building and remaking in an effort to preserve and maintain resilient neighborhoods.





Philip Cina
Staten Island Technical High
School

Public Buildings | Architecture and Engineering I will be studying Civil Engineering as an incoming freshman at the New Jersey Institute of Technology. Since middle school, I have always been involved with S.T.E.A.M. I became involved in robotics and continued it throughout high school as my main extracurricular activity. During my sophomore year I was introduced to Computer Aided Design (C.A.D.) through my AutoCAD class, which helped me start thinking about future career choices. After doing exceptionally well in AutoCAD, my school gave me the opportunity to work on a team project to design special projects for our community's parks and recreational areas. I also received a job offering as a C.A.D. Designer at an electrical company, which has provided me with valuable work experience by utilizing the program and skills I have acquired over the years. Based on my qualifications and prior experiences I was placed into Public Building's Architecture and Engineering Unit under Kristina Kesler. I was able to analyze floor plans, read blueprints and expand my knowledge of C.A.D. My previous experience in AutoCAD has benefited me greatly and has allowed me to excel in this internship while learning new skills and techniques.



**Geovanni Colon** 

Chelsea Career and Technical Education High School

Program Management | Information Technology Services S.T.E.A.M. professional fields have been a driving force in my life and is something I want to pursue as a young adult, specifically technology. Coming back to the DDC for a second year in the High School Summer Internship Program has allowed me to embrace my passion for Information Technology. The experience has helped me to blossom into an extremely skilled IT protégée. I had the opportunity to shadow IT Help Desk specialists, such as Donna Lynn and Ambu Chherty, which has allowed me to gain insight into the technological needs of DDC and technical advances needed for DDC to build the City of New York. Throughout the internship, I learned what true teamwork is, as well as the realities of the public sector and how to succeed. DDC has truly allowed me to strive for the future that I want for myself. I hope to be able to share that passion with younger generations to come.



**Mohamed Doumbouya** 

Harlem Village Academy High School

Administration | Budget and Finance

I am a rising senior at the Harlem Village Academies High School. I am passionate about S.T.E.A.M. because it has introduced me to careers that I had not considered before. I have learned so much about these fields that I did not know applied to me and my interests. At DDC, I had the opportunity to go to live construction sites and receive personal tours with full explanations on the project's details. I was assigned to the Administration Division's Budget and Finance unit where I enhanced my professional etiquette, learned useful data analysis tools, and networked with individuals who have been working in this profession for numerous years. Upon entering this internship, I was unsure about my future profession. I'm happy to say that I now see myself in the Compliance and Reimbursement field of construction.



Jovan Duncan
Urban Dove Charter School

Program Management | Information Technology Services I am a rising senior at the Urban Dove Team Charter School and am interested in learning about the development and process of becoming an entrepreneur with the hopes of opening a bank and creating a clothing line. During this internship, I became OSHA certified and learned about construction and safety attire, and chemical hazards. I was assigned to the Information Technology Services Department, where I learned about new software programs that help DDC run on a daily basis. I was able to familiarize myself with the computer programs. I am very grateful for this internship and would like to thank the STEAM Initiatives unit. They were always aiding me and the other interns even when thought we had it all under control. They provided us with an unforgettable experience.





Za'kilya Faison

It Takes a Village Academy

Human Resources and Staff

Development | Payroll and Time

Management

This upcoming fall I will be attending SUNY Oswego, where I plan to double major in Graphic Design and Business Administration with a minor in photography. I have always loved to write poetry, indulge in photography, and traditional painting and drawing which has led me to pursue these in my college career. I am passionate about STEAM because although its focus is on Science, Technology, Engineering, Architecture/Art, and Mathematics, there is also a business aspect that ties these categories together. The business aspect that ties STEAM together is crucial. I have worked in Human Resources but within my department I have been assigned many different projects. I have gained additional knowledge from visiting construction sites and I have become OSHA certified. I have advanced my skills in graphic design, art, Microsoft excel, flowcharts, and data analysis which in turn, has made me more well-rounded and skilled. This internship has taught me so much and I am very thankful that I've gotten this opportunity. I aspire to become a Graphic Designer and hope to work in the advertising and business industry.



Casey Ferenc

Manhattan Comprehensive Night and Day High School

**Public Buildings** 

I am a recent graduate of the Manhattan Comprehensive Day and Night High School and will be a freshman at the Borough of Manhattan Community College in the Fall. I have always had an interest in architecture and engineering. When the opportunity came to intern at the Department of Design and Construction, I immediately knew this was something I would enjoy. The staff at DDC is very welcoming, caring, and helpful. They are always willing to listen and offer very insightful advice. While working in the Public Buildings Division, I visited many DDC construction project sites such as the Manhattan W59th St. Marine Transfer Station, the NY Police Department Sandbomb in the Bronx, the NYPD Tow Pound in Red Hook, Brooklyn, and the Manhattan Class Company Theater on the West Side of Manhattan. Visiting these sites opened my eyes to how involved DDC is in improving the lives of New York City residents and visitors alike. I learned about safety requirements for construction sites, the process of building and designing buildings, and how city agencies collaborate with private companies to turn an idea into reality. The experience that I gained at DDC has peaked my interest in engineering and architecture. I hope to apply for additional internship and career opportunities within these fields. Thank you STEAM Team!



Mariana Heredia

Millennium High School

Public Buildings

I am a rising senior at Millennium High School. I have a passion for helping others and my community. I am involved in the No Kid Hungry Club at my high school, where we raise money for starving children in the United States. I also enjoy contributing to my school's community through the newspaper where I am an editor and a writer. Another passion of mine is being part of my school's Stunt team where I am able to express myself through a mixture of dance and cheerleading. A rewarding aspect of working in the S.T.E.A.M. field is having the opportunity to build facilities and buildings, such as libraries and fire stations that improve our communities. Interning at DDC this past summer has been a wonderful opportunity, it was also my first experience working within the S.T.E.A.M. fields. I was assigned to the Public Building's Cultural/Parks Program Unit. This gave me a glimpse into how many details are involved in DDC's pubic building projects and the importance of time management. I am certain that the knowledge and exposure I have gained from my internship at DDC will benefit my future career in engineering.



Wilmer Hernandez Lino
High School of World Cultures
Public Buildings

I am excited to be a rising senior this upcoming fall at the High School of World Cultures, a small school on the James Monroe Campus in the Bronx. I am currently deciding between majoring in electrical or civil engineering in college. I have always enjoyed working with computers and technology; that has been enhanced since starting my internship at DDC. Being at DDC has been a great learning and networking experience. I have met many S.T.E.A.M professionals and worked on many team projects. I was assigned to the Public Buildings Division in the Build It Back Unit, where I immersed myself into the field of architecture. I was able to witness firsthand just how complex architecture can be. The STEAM Unit prepared many workshops where I was able to gain valuable knowledge and new insight from the experience of S.T.E.A.M professionals. This internship has been a wonderful opportunity. It is helping me prepare for my future as an engineer. I hope to attend City College to pursue a career in electrical or civil engineering.





Bihong Hu

High School for Dual Language and
Asian Studies

Program Management | Information Technology Services I just graduated from the High School for Dual Language and Asian Studies, and will be pursuing architecture at the University of Virginia in the upcoming fall. Throughout my four years of high school, I was heavily involved with S.T.E.A.M. activities, particularly computer science, which has shaped me into a builder of abstract ideas, where I put lines of code into action to create a tangible solution. I participated in my school's Computer Club, where I was able to learn Java. The completion of each project was rewarding and satisfying; seeing my codes in action and solving problems made all my efforts worthwhile. Although I love computer science, I also look forward to immersing myself in architecture. I am drawn to the abstract structural design and complex mathematical concepts that allow such structures to exist.

At DDC, I was assigned to the ITS unit, where I worked on the Pedestrian Ramp Project. My role included inspecting and ensuring the quality of pedestrians ramps by navigating through Google Maps. I also learned how to use Geographic Information System and understand how it is used at DDC. By meeting different architects and engineers, and learning about their experiences, I have a better understanding on how to work towards achieving my future goals.



Tina Lim
Stuyvesant High School
Office of the Chief Architect

During my time at Stuyvesant High School I had the chance to take technical drawing, which exposed me to the world of architecture. I also took classes in interior design and architecture. Over the summer of 2016 I participated in the CollegeNow architecture program for more than thirty-two hours a week. We spent six weeks learning about architecture and created models out of basswood. I also took classes at the Ashcan Studio, which is a visual arts program designed for artists who wish to advance their artistic and creative skills. In my senior year, I participated in the ACE Mentor program at KPF (Kohn Pedersen Fox Associates), where we worked with professionals in real work environments and gained experience working in design and construction. As an intern at DDC this summer, I was assigned to the Public Arts Unit in the Office of the Chief Architect. Working in the Public Arts Unit gave me the opportunity to learn about public art and its significance. Through my research on the city's Public Art I helped to incorporate my findings into future DDC projects. Aside from architecture, as a student in New York City, I have found many opportunities to explore my other interests. In the diverse cultural landscape of New York, I can immerse myself into different cultures and visit places that would otherwise be impossible to experience. Some interests that I discovered while growing up in the city are foreign languages, drawing, and photography. This coming Fall, I will be pursuing a Bachelors in Architecture at Syracuse University.



Tavon Pugh

Brooklyn Generation School

Public Buildings

Starting in the fall, I will be attending Medgar Ever College majoring in business management. The STEAM unit has introduced me to many different fields I was previously unaware of. My experience at DDC this summer has taught me to think outside of the box and explore new career goals and paths. I was assigned to the Public Buildings Administration Unit where I worked on data analysis and project management. Prior to my internship at DDC, I was focused on pursuing a career in business after college. However, after my wonderful internship experience at DDC and networking with many engineers, architects, construction managers, and accountants I have developed an interest in engineering. Through this internship I improved my skills in Microsoft Office and time management. As a bonus, I became OSHA certified. I learned about the day-to-day operations and how knowledge combined with hard work and dedication contributes to a person's success. The skills the DDC professionals have taught me, gives me an advantage over other students my age. I now have real world experience and I know how to successfully network.



Sarah Saad

Brooklyn Technical High School

Public Buildings

I am a rising senior at Brooklyn Technical High School, majoring in Architecture. I am also an artist, watercolorist, and a doodler. I am passionate about S.T.E.A.M. because through S.T.E.A.M. we are able to interact, investigate and innovate the world around us. For me, the goal of S.T.E.A.M. is to better society and facilitate living. My experience in the S.T.E.A.M. fields range broadly; I have studied physics, learned computer programs, and dabbled in structural engineering, but what I truly have a passion for is architecture. I applied to DDC's High School Summer Internship Program hoping to further my interests in the S.T.E.A.M. fields. During the internship, I was assigned to the Public Buildings Department, and specifically the Public Libraries Unit. I learned how to create and edit gantt charts, create budgets, write memos to the Engineer Audit Office, understand floor plans, and create project fact sheets. I also visited construction sites where I got to learn more about the Build It Back program and the construction of the Manhattan Class Company theater. In the future, I aspire to become a licensed architect, and hopefully open up my own architecture firm specializing in the creation of economical, energy friendly, green, sustainable designed buildings. My goal is to design buildings that last for generations and are beneficial to the communities around them.





Manjot Singh

Francis Lewis High School

Program Management |
Information Technology Services

I am currently a rising senior at Francis Lewis High School. I enjoy playing and watching basketball, debating, photography and sightseeing around New York City. The different styles and forms of architecture in NYC has always intrigued me. I am interested in pursuing a career in civil engineering, as I have passion for math and science. I enjoy the S.T.E.A.M. fields because it allows me to work with various people and challenges my problem-solving skills. My experience in S.T.E.A.M. has been extensive. At DDC this past summer, I was assigned to the ITS unit, where I was working with the different technologies and computer systems in the agency. I had the opportunity to expand my knowledge of computer hardware and programs. Some of my tasks included switching monitors around the office to setting up new Surface Pros for DDC employees. This internship has allowed me to learn about the various careers in construction and engineering. I am taking away wisdom, experience and advice from all the engineers, architects, accountants and others who volunteered their time to speak to us about their careers. I am looking to pursue a career in civil engineering, but now because of this experience, I have an open mind and exposure to other S.T.E.A.M. professions. I want to surpass different limits in whatever career I decide to pursue, whether I am a pilot, engineer, politician, or an FBI agent.

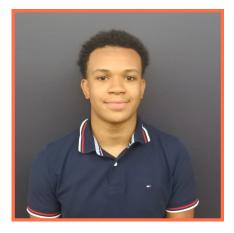


Aristos Smirniotis

Energy Tech High School

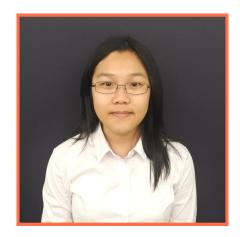
Public Buildings | Architecture and
Engineering

I am a rising junior at Energy Tech High School. There are many interesting aspects I have yet to discover about STEAM. However, my internship at the DDC has allowed me to experience engineering and architecture in a professional environment. I was assigned to the Public Buildings Division Architecture & Engineering Unit, where I had the opportunity to learn how to use AutoCAD. With my new knowledge of plans, sections, and elevations, I have a better understanding of the design process and the role of similar design software, such as Revit. In addition, my supervisors have shown me what precedent studies are and how construction affects the surrounding area and community. I also had the opportunity to learn about well-known architects and their famous works of art around the world, and the inspiration behind them. As I am learning more and more, my goal to pursue a career in either engineering or architecture has become clearer. I am very grateful for the opportunity to have participated in this summer's DDC High School Summer Internship Program.



Brandon Stewart
The Scholars' Academy
Infrastructure | Design 1

I recently graduated from Scholars' Academy High School and will be attending Georgia Institute of Technology this upcoming fall. During high school, I played for the Amateur Athletic Union (AAU) basketball team, a non-profit, volunteer, sports organization, as well as my high school's varsity basketball team, and in fact received a few scholarship offers. Along with basketball, I am also interested in pursuing Science, Technology, Engineering, Architecture/Art, and Math. Although I haven't had much professional experience with S.T.E.A.M., I have always excelled in math and science. Interning this summer at the Department of Design and Construction is a great start for my career. I was assigned to the Infrastructure Division and worked with the Design 1 Unit. I was introduced to the civil engineers who work within the unit, and learned through a hands-on approach about the various programs they use to plan, design, and manage construction projects. After hearing from DDC professionals about their professional and educational backgrounds, and speaking with Infrastructure Design 1 staff members, I now hope to pursue a career in mechanical engineering.



Selena Tan

Midwood High School

Infrastructure | Program
Administration

I am a rising senior at Midwood High School. I have always been a strong student in math and science, so pursuing a career in S.T.E.A.M. has always been my goal. As technology advances every day, I realized that this is a good time to be engaged in S.T.E.A.M. I took S.T.E.A.M.-related classes such as AP Physics, however, I was only able to capture a small glimpse into these fields. As an intern at the Department of Design and Construction's High School Summer Internship Program, I was given the opportunity to receive firsthand experience in S.T.E.A.M. fields. I was assigned to the Infrastructure Division's Program Administration Unit where I learned how to read, analyze, and edit topographical surveys. I was introduced to Capital Project Initiation forms and learned how to read and analyze them. I was also able to network with many professionals and learn about the professional and personal experiences that helped to mold their careers. My visions for college and career are now very clear. My internship experience at DDC has solidified my plans to secure a good college education and pursue a successful career in civil engineering.





Fatoumata Travele

New Visions Charter High School For Advanced Math & Science II

Program Management | Information Technology Services I am a rising junior at the New Visions School for Advanced Math and Science 2 in the South Bronx. I have always been interested in building objects and curious about the manufacturing process for different products. The DDC High School Summer Internship Program has given me an opportunity to experience and learn basic concepts of engineering and architecture. DDC has been very welcoming and has provided more than enough information to guide me in my future career path as an Architect and Real Estate agent. This summer, I was assigned to the Program Management Division Information Technology Services Unit. I had the opportunity to work on ITS budget tasks, which taught me how to work with a given budget, an extremely important concept that will prepare me for a career in architecture and real estate. This internship has been very enjoyable; the DDC staff are influential and motivating. I would highly recommend this internship to anyone interested in engineering or anyone who is unsure about their career path.



**Angelica Vasquez** 

Staten Island Technical High School

Human Resources and Staff
Development | Health and Safety

I am a rising senior at Staten Island Technical High School. S.T.E.A.M. is important to me because it encompasses all the elements that define our future, and the generations after us. At my school, freshmen are required to take half a year of Television Studio Production, and a full year of Civil Engineering and Architecture. These classes, which utilize the design software AutoCAD and Revit, allowed students to become certified users of AutoCAD. In the future, I plan to become a biomedical engineer to help patients discover new solutions to medical issues and disabilities. During my time at DDC, I was assigned to the Human Resources Division Health and Safety Unit, which has helped me not only improve my Microsoft Excel skills, but also be able to analyze data more efficiently as it relates to safety support for the agency's built environment professionals. I am very excited to have had the opportunity to spend my 2017 summer at DDC.



Lucy Xu

Brooklyn Technical High School

Infrastructure | Design 2

I recently graduated from Brooklyn Technical High School and I will be attending Cooper Union in the fall. At Brooklyn Tech, I took technical courses such as Digital Electronics and Digital Systems Design. These two classes introduced me to topics that I had never approached before and I was challenged to think more rather than to memorize. Aside from academics, I completed an electrical engineering internship after my junior year, where I was exposed to circuits and design work that electrical engineers had applied to real life. After these experiences, I decided to pursue electrical engineering at Cooper Union. However, I had not had a chance to explore other engineering fields. I decided to apply to DDC's STEAM internship after hearing about how past interns were able to learn about fields outside of their major. After two weeks at DDC, in the Infrastructure Division's Design II unit, I have certainly learned plenty about civil engineering and architecture from my work and peers, who are pursuing those two majors. I have learned the process of how a Cost Performance Index (CPI) turns into a task order, was introduced to topographical surveys, and organized photo logs and tree inventories. But, there is still so much to learn. I hope to continue to expand my knowledge of other fields related to engineering and the built environment.



Andrew Yamraj

High School for Construction

Trades, Engineering and

Architecture

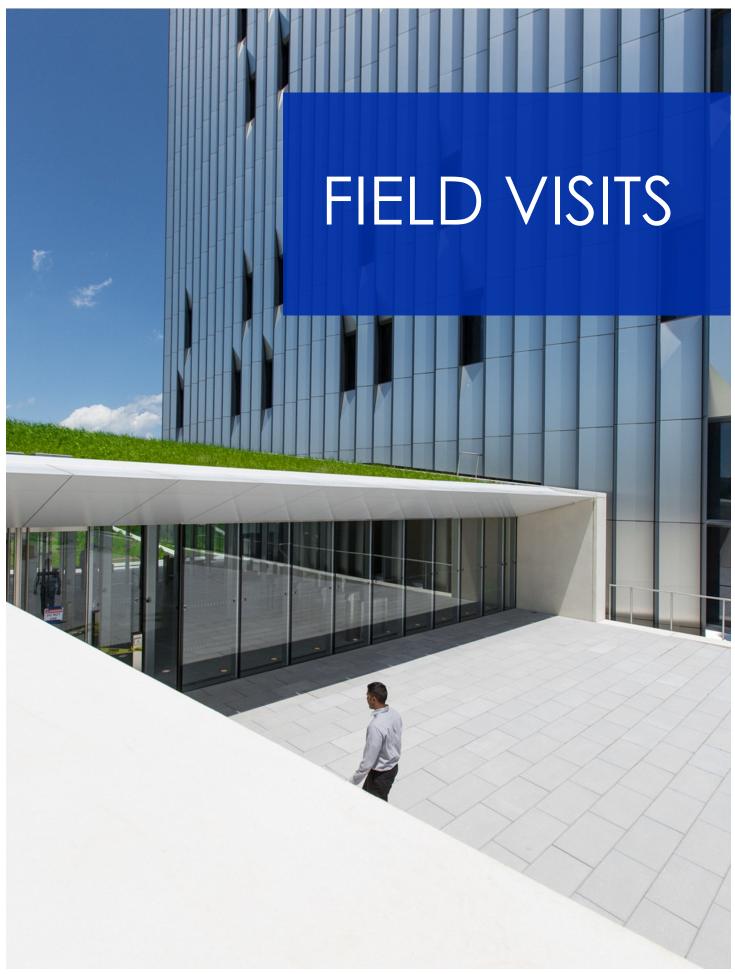
Infrastructure | Construction Management 4 I am a rising senior attending the High School for Construction Trades, Engineering and Architecture in Ozone Park, Queens. I have always enjoyed participating in various Science, Technology, Engineering, Architecture/Art, and Math activities, such as designing and constructing multiple planter boxes for my school's courtyard with a team of my peers. My future career goals are to someday become a part of a union and work for twenty years. I hope to also start my own business in construction. During my time here at DDC, I have been assigned to the Construction Management Unit within the Infrastructure Division. My supervisor, Ralph Wuest, gave me the opportunity to learn about the behind-the-scenes work that contribute to the construction of DDC projects, as well as expand my knowledge of Microsoft Excel. I have also had the opportunity to work with the STEAM Team here at DDC, they are truly amazing! Thank you DDC!





Zhengyang Zhu
Stuyvesant High School
Administration | ACCO

I am a rising senior at Stuyvesant High School and am passionate about Science, Technology, Engineering, Architecture, and Mathematics. I strongly believe that my future, and the future of others, will rely heavily on these fields. My interest in technology, engineering, and design led me to a summer internship at DDC. I have always enjoyed working with computer hardware, reading the latest on computer technology, and design. I was assigned to the ACCO Unit within Administration Division. The main role of the unit is to determine which corporations are eligible to receive contracts for construction projects managed by DDC. I helped to perform background checks on private companies once it was determined they were approved for financial awards. I had the opportunity to learn firsthand the importance of meticulous documentation and data organization. I was considering two possible career goals; my interest in design and engineering encourages me to pursue a future in architecture, and my interest in Information Technology gives me the passion to seek a career in computer hardware engineering. DDC has enhanced my knowledge of architecture through educational workshops and networking opportunities that the STEAM division provided the interns. Having heard from different DDC professionals about their personal and professional journeys, this internship has made architecture a more viable future career choice.



### **FIELD VISITS**

#### **BUILD IT BACK | NEW DORP, STATEN ISLAND**

On July 12, 2017, the High School Interns visited various NYC Build It Back Program construction sites in New Dorp, Staten Island. DDC's architects, project managers and college interns led a tour around the neighborhood showcasing several homes repaired by Build it Back. They spoke to students about the many elements of the program. Build It Back offers assistance to homeowners, landlords, and tenants in the five boroughs affected by Hurricane Sandy in October 2012. The Program provides repair, rebuilding, reimbursement, or acquisition options for affected home owners so that they can return to safe, resilient and sustainable homes. Staten Island was severely affected by Hurricane Sandy. Many homes were left in



need of extensive repairs and modifications in order for those homes to be able to withstand future natural disasters. The interns learned about how the program both revitalized homes and also helped to promote economic stability in the community through sustainable and smart home rehabilitation.

The construction site tour of homes in the program was led by Build It Back Program Project Executive Kenneth Petrocca, Senior Project Manager Kevin Lee, along with college interns, Vincenza Perla, Ibrahim Husein, and Abraham Gonzalez. The team spoke about the work of Build it Back, their day to day duties at DDC, as well as their respective career and educational backgrounds. In order to adapt to the changing environment and to provide for protection from future storms, the homes were elevated to comply with flood elevations standards. During the elevation process, home foundations were also reinforced and set to industry standards. Other homes that were demolished or damaged beyond repair by Hurricane Sandy were replaced by new elevated structures rebuilt to include resiliency improvements. The team offered insight into the process of repairing the homes and the importance of elevation for homes in coastal communities. In addition, the interns learned about the many measures taken before homes are repaired and what is entailed in the designing of sustainable homes.

The high school interns also heard from DDC College interns who shared their educational and professional experiences. The college interns stressed the importance of being open to learning new concepts. They also expressed how they have been able to take what they have learned in the classroom and apply it in the field working at DDC. They encouraged the High School interns to pursue challenges and to explore opportunities within their areas of interest.



#### **FIELD VISITS**

#### MCC THEATER | MANHATTAN



High School intern Wilmer Hernandez (left) speaks with LiRo Group MEP Inspector Vincent Lappin (middle), and DDC architect Brett Degnan (right).

On Wednesday July 19, 2017, the NYC Department of Design and Construction High School and College interns visited the DDC construction site Manhattan Class Company Theater, one of New York's leading off-Broadway theater companies. The MCC Theater tour was led by DDC architect Brett Degnan, Senior Construction Project Manager Suzanne Lee Kim, and LiRo Group MEP Inspector Vincent Lappin.

The MCC Theater is scheduled to be completed in 2018. When completed the theater will include three levels; the ground level which will house two theaters; a 243-seat theater and a 99-seat black box theater. The Control Room level will consist of a lighting room, a sound control room, A/V closet, and dimmer and dressing rooms. The mezzanine level will accommodate administrative offices, meeting rooms, rehearsal studios, pantry, and a banquet area.

The project supervisors spoke about the complexity of building two theaters adjacent to one another. DDC Architect Brett Degnang, noted that the concrete structure was fortified to provide an enhanced level of sound proofing due to the noise caused by vibrations from trains entering the Amtrak tunnel directly below MCC. The engineers explained the many challenges they faced during construction and the interns learned about the importance of communication and teamwork among all the various professionals in the field. The interns asked many questions and received practical career advice from the built environment professionals.



#### **FIELD VISITS**

### INFRASTRUCTURE | STATEN ISLAND

On August 2<sup>nd</sup>, 2017, NYC's Department of Design and Construction High School summer interns arrived in Staten Island for their final construction site visit to observe firsthand the Infrastructure Division's work to create a sustainable and resilient community. Staten Island has historically experienced flooding residential in neighborhoods from rain storms and hurricanes, such as Hurricane Sandy. To resolve those issues, DDC initiated multiple infrastructure projects to improve living conditions and enhance quality of life.

The first site that the high school interns visited was the South Beach Project, a sewer and pipe installation site. South Beach Project is an ongoing \$84 million project to fix 22,000 feet of storm sewers. Arvind Patel, an Infrastructure



Sheldon Ave. Project, a completed BMP Project.

Deputy Director, and ARCADIS Senior Construction Manager Tom Husband, elaborated on the reinstallation process and maintenance of old pipes to improve roads and sidewalks. Interns observed different sheeting, pipes, and panels. Some of the pipes used for the project were clay pipes. Project managers explained how it works well with both sanitary and storm pipes because corrosion doesn't occur.

The second site was the Hunter Ave. Project, a Best Management Practice (BMP) in process. BMPs are a method of reducing water pollution. They capture excess water from storms and send it through a number of natural barriers that strain pollutants and sediment from the water. By channeling water to a designated area, they reduce flooding and filter storm water runoff without negatively affecting the surrounding environment. Adding more traditional sewage systems, such as drainage pipes, can be invasive and hurt the environment.



Infrastructure Engineer in Charge David Peterson elaborates on project details at Hunter Ave. Project.

By comparison, BMPs require much less construction effort and man-made materials. Staten Island currently has over twenty (20) BMP projects undergoing construction. Infrastructure Engineer in Charge David Peterson explained that the Hunter Ave. BMP Project is geared mainly towards wetland area preservation. Engineers, designers, and environmental specialists created methods of directing excess storm water to collect in an excavated area before flowing back out into the sewer pipes. During the collection process, rocks and other sediments are filtered out. Environmental specialists preserved the nature surrounding the area by planting native flowers, trees, and plants. Environmental specialists also implemented goose fences around the lake to stop any geese from landing and eating plants.

The last location was the Sheldon Ave Project, a completed BMP. The area was beautifully designed with two ponds filled with water that are connected by 15,000 feet of pipelines across neighboring Staten Island communities. Infrastructure Engineer in Charge Monzer Shahin and Arvind Patel explained the chemical, biological, and physical changes that occur while processing the water. The project in fact, won the 2017 Institute for Sustainable Infrastructure's Envision Silver Award for improving storm water drainage and connecting 600 homes to the City's sanitary sewer system.



DDC High School Interns learning about the South Beach Project.



DDC High School Interns inspecting the site.



Interns learn about the function of the sewer system in the at the South Beach Project.



#### ROAD TO ARCHITECTURE, ENGINEERING, AND CONSTRUCTION



DDC engineer Jade Bailey shares with High School Interns her professional and personal experiences.

On July 17, 2017 and July 24, 2017, the New York City Department of Design and Construction High School interns participated in the Road to Architecture, Engineering, and Construction workshops. DDC staff members from various built environment professions spoke to our high school interns about their professional and educational experiences.

Sofia Zuberbuhler-Yafar, an Infrastructure Project Executive, shared her personal interest in green infrastructure and urban design. She defined green infrastructure as a method to use resources that are more tangible. Zuberbuhler-Yafar, a landscape architect by trade, works with directors and designers at DDC to promote Green Infrastructure, mange storm water, and design bioswales.

Jade Bailey, a civil engineer, explained her responsibilities as a Project Manager for the Sanitation and Transportation Unit, which are to ensure designs for sanitation and wastewater facility treatments are implemented correctly. She also expressed her commitment to finding a balance between her personal and professional lives, a complex mission that requires dedication and patience.

Jorge Tua, a civil engineer, presented different projects he has worked on as Director in the Infrastructure Division. He displayed blue prints of the Times Square reconstruction and utility plans of the 37<sup>th</sup> Road Plaza in Jackson Heights. In addition to his professional life, Tua also spoke about his personal life and about how he was not able to complete college immediately following high school, but went back to college years later to become a licensed Professional Engineer. Tua ended with an inspirational pep talk where he stated, "Don't take anything for granted. Stay in school and go to college. If I could go back to school at 38, then you can do it too."

Barry Vanterpool, a Director in the Budget and Finance Unit, spoke to students about change. He asked them what they wanted to be when they were younger, and what they want to be now to underscore that without change, there is no growth. Vanterpool also emphasized the importance of a skillful application of knowledge and understanding.

Rema Davis-Bynoe, Deputy Director of the Budget and Finance Unit, spoke about the importance of pursuing fields that best interest the interns. Although Davis-Bynoe is an accountant by trade, she continued to pursue her passions, which are design and fashion. She currently ensures payments are received for federal projects managed by DDC, such as the Build It Back Program. She stated, "Don't let anything stop you from doing what you want to do."

Ashwani Bedi, Deputy Director of Public Buildings, encouraged the interns to be inquisitive, to advance in degrees, and always be hungry for knowledge. He studied civil engineering with a focus on structural engineering. Before coming to DDC, Bedi worked in the private sector as an engineer consultant for five different firms. His work experience made him realize that knowledge and experience are two different things. He "Don't stop when you are tired. Stop when you're done. Learn and master what you're learning. It's ok not to know everything."

The last speaker, Lucy Wong, a Director of Public Buildings, encouraged the interns to find their passion. "Be passionate about what you do because passion is the key to happiness." She also shared some life advice and said "Don't feel like you're ever held back. Stand your ground, push through, and learn as much as you can. The road to success is not linear. Take chances on unknown experiences and strive to become your dream."

The advice from the diverse panelists presented to the High School interns illustrated that regardless of professional and personal struggles, it is important to persevere, seek opportunities, and identify when changes are necessary. Although all speakers came from various backgrounds, they pursued their passions and continuously use their knowledge and experiences to contribute to the building of New York City.

#### **COLLEGE READINESS**

On Monday July 17, 2017, the NYC Department of Design Construction High School Interns participated in College Readiness workshops. A fundamental component of the High School Summer Internship the Program informational workshops provided to the interns. these workshops, received advice in regards to their academic and future professional goals.

The College Application & Financial Aid 101 workshop focused on the various types of colleges, as well as the necessary tools for navigating the



DDC Summer College Intern Oluwatosin Sanusi (Tosin), DDC College Aide Suellen Fonseca, DYCD Summer College Interns Meraj Choudhury, and Joyce Chan discuss their college experiences.

college application process. DDC STEAM Deputy Director Sandrine Fermino, DDC Summer College Aide Suellen Fonseca, and DYCD College Intern Joyce Chan, provided the interns with essential information regarding the very complex financial aid process. The speakers highlighted the importance of completing the Free Application for Federal Aid (FAFSA) form in a timely manner, and expanded on the various types of loans, grants, and scholarships available to assist them with their future education costs. The High School interns were not only extremely inquisitive about the college application process, but also shared with their peers any advice they had received from their own counselors, or based on their own experiences. The interns were much more confident in their ability to navigate the multifaceted college and financial aid application process.

The College Panel provided the High School interns with an opportunity to hear about the College interns' education and professional experiences. The interns heard from DDC Summer College Intern Oluwatosin Sanusi (Tosin), College Aide Suellen Fonseca, and Department of Youth and Community Development (DYCD) Summer College Interns Meraj Choudhury, and Joyce Chan. Tosin, a Chemical Engineering major at Columbia University, gave a personal account of her transition from attending High School in Nigeria, to attending college in New York. She spoke about the importance of perseverance, and noted that even through challenges may come up at any given moment it is up to each student to create an environment where he or she can thrive. In addition, Tosin also encouraged the interns to surround themselves with people who can provide a solid foundation for emotional support. Suellen, a Speech Pathology major at St. John's University, and a graduate of St. Michael's Academy High School, shared her career and educational experiences. She spoke about her passion for education and her goal of become a speech pathologist with a concentration in early childhood education. Suellen reflected on her continuing education process, and encouraged the high school interns to pursue their fields of interest. Meraj, a mechanical engineering student at the NYU School of Engineering, and a graduate of the Manhattan Center High School urged the interns to take an active role in college. He spoke about the struggles he encountered during his freshman year, and his desire to overcome those challenges and persevere. Meraj also described the changes he has observed in his level of maturity and confidence, as well as his successes during his later college years. Meraj encouraged the interns to keep themselves busy by participating in various projects and clubs in college. Joyce, a mechanical engineering student at Boston University, spoke about her personal college application process and stressed the need for students to be more open minded when applying to college. She informed the interns not to limit themselves and to take advantage of the many opportunities available.

#### **INTERVIEW SKILLS & RESUME WRITING**

On Monday July 17, 2017, the NYC Department of Design and Construction High School interns participated in an Interview Skills workshop. DDC STEAM Initiatives Program Coordinators Teresa Ye and Tatiana Vargas led the workshop to prepare students for future interviews in both the educational and professional realms.

The High School interns were divided into four working groups where they participated in mock interviews led by DDC College Aide Suellen Fonseca and Summer College Interns Oluwatosin Sanusi, Joyce Chan and Meraj Choudhury. While each High School intern practiced interviewing, group peers observed and evaluated body language and responses. Once interviews were completed, interns shared their observations regarding the different qualities they perceived were essential for a successful interview, for example, concise and knowledgeable responses, honesty, a firm handshake, eye contact, a calm demeanor, and a degree of charisma and charm.

Winifred (Winnie) Corton, DDC Human Resources Senior Recruitment Analyst also participated in the workshop sharing wisdom she has gained from her experience as an interviewer, and shared valuable advice. Specifically, she noted the importance of preparation for interviews by reviewing the job description and preparing appropriate and job related questions that demonstrate to an interviewer that the candidate has done their homework, always checking the organization's website and joining the student level of professional organizations for additional networking and career opportunities. The High School interns reflected on ways to improve their body language, avoid run-on sentences, and prepare thorough answers for interview questions. Students left the workshop with more confidence in their interview skills, and in their ability to complete a successful interview.

On July 24, 2017, the High School interns had the opportunity to participate in a resume and cover letter writing and workshop led by DDC Infrastructure Engineers in Charge Thomas Leung and Cristian Schwartz led. Mr. Leung reviewed the resumes of all twenty-eight interns, and provided them with valuable feedback on how to improve their resumes.

Mr. Leung and Mr. Schwartz spoke about the purpose of a resume and explained the various types of resumes one can

have. They emphasized that a resume should follow a general format consisting of: a heading, objective, summary of qualifications, education, and experience.

Additionally, Mr. Leung and Mr. Schwartz discussed the purpose of a cover letter, and gave the interns tips on what to include in their cover letters for various purposes. One of the pivotal suggestions Mr. Leung shared with the interns was "to show your skills by giving examples, instead of just simply stating what they are".

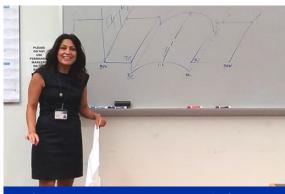


DDC Engineers in Charge Thomas Leung and Cristian Schwartz talk to the High School Interns about the importance of a resume.

#### **GIS MAPPING & BIM**

On August 4<sup>th</sup>, 2017, NYC's Department of Design and Construction High School summer interns participated in a Geographical Information Systems (GIS) Mapping and Building Information Modeling (BIM) workshop led by DDC's Assistant Chief Cristina Villamil, Programmer Cherian Pooppallil, BIM Manager Brandon Schumacher, and GIS Programmer Tatyana Plashkova.

Cristina Villamil illustrated the various components of an infrastructure blueprint, including profiles, elevations, and symbols. She emphasized the importance of mastering basic math skills that are used when determining how DDC builds New York City. For example, mathematical proportions and ratios are essential to the design of manhole shafts.



**DDC** 's Program Management Assistant Chief Cristina Villamil addressing the High School Interns.

Tatyana Plashkova demonstrated the GIS map application, which allows for users to view various layers on a single map, including all DDC projects, school districts, city council districts, etc. She provided an overview of how the software enables users to capture, store, and analyze data to advance the design and construction process.

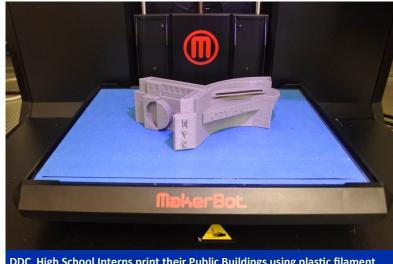
Brandon Schumacher and Cherian Pooppallil spoke to the High School interns about the implementation of Building Information Modeling (BIM) in the architectural world. They demonstrated the basic functions of 3D design software Revit, specifically the software's capability to allow numerous technical specialties (HVAC, plumbing, electrical, and structural) to simultaneously collaborate on a design easily. This coordination increases efficiency and resolves system conflicts during the design phase prior to the construction phase.



DDC High School Interns participating in the workshop.

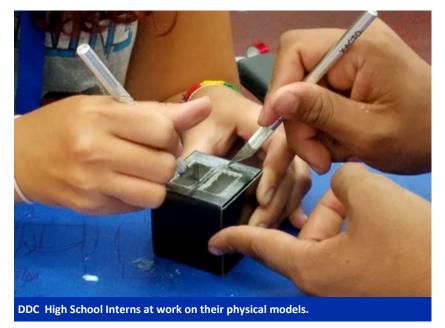
#### SKETCH UP & MODEL BUILDING

On July 31, 2017, NYC Department of Design and Construction High School interns participated in a SketchUp workshop. STEAM Program Coordinator Anthony Martin led the workshop to introduce the world of architecture and engineering through Building Information Modeling (BIM). SketchUp is a 3D modeling computer program with a wide range of drawing applications. The program can be used for architectural and interior design, landscape architecture, civil and mechanical engineering. The workshop provided an introduction to the basics of SketchUp and challenged the interns' creativity. The interns were first asked to draw a block letter from their name on a blank sheet of paper. The interns



DDC High School Interns print their Public Buildings using plastic filament on the Makerbot 3D Printer.

then randomly folded the paper and traced the outlines to produce shapes. Using these shapes, interns were tasked with designing a model of a public building on SketchUp. Before they started modeling their public buildings, interns went through a brief overview of Sketchup functions and capabilities, and learned the benefits of what the program has



to offer. In just one hour they experienced the ease of generating 3D models and expanded their sense of design. By the end of the day, interns were able to independently create public buildings on SketchUp. The futuristic models were then uploaded to 3D printers where they were converted to an STL format. Interns used MakerBot Replicators that used PLA filament to print robust, but rough study models of their digital SketchUp designs.

On August 7, 2017 students continued this workshop with a more hands-on approach. They used their creativity to create physical models of various DDC projects, including Columbus Circle, the Central Park Precinct, the

Bronx Museum of the Arts, the Stapleton Library, FDNY Engine 277, and a bioswale. Students had the opportunity to select the one of the DDC projects displayed and work in groups to construct their interpretation of the site. They planned their model designs by drawing mock blue prints, estimating dimensions, and identifying which materials were needed. A range of materials was used such as cardboard, Styrofoam, straw, Balsa wood planks, wooden sticks, and sheet moss.

Program Coordinator, Antony Martin, demonstrated different methods to cut and construct their models with the use of X-acto knives and scissors. With different shapes cut out, students assembled their project with various adhesives such as hot glue, tacky glue, spray glue, and tape. For finishing touches, groups used different embellishments including model trees, pebbles, washi tape, and tin foil to enhance their projects.



**Featured DDC Project, Central Park Precinct.** 

High School Interns' replica of the Central Park Precinct.



DDC High School Interns at work on their physical models.



DDC High School Interns' replica of FDNY Engine 277.



Side view of the Columbus Circle replica.



High School Interns' replica of Columbus Circle.



**DDC High School Interns working on their models.** 



# **SPECIAL EVENTS**

# **ORIENTATION & SUPERVISOR MEET AND GREET**

On July 5th, 2017 twenty-eight New York City High School students began their 2017 High School Internship Program at the New York City Department of Design and Construction (DDC). The internship provides a behind the scenes introduction to the fields of architecture, engineering, construction, design, law, business administration, and finance with the 1,400 professionals at DDC.

The High School Summer Internship Program is organized in partnership with the NYC Department of Youth & Community Development through DDC's STEAM education initiative, which was created in 2014 to establish a diverse and inclusive pipeline for New York City's youth to engage in architecture, construction, and engineering (ACE) industries. The agency also hosts a summer internship program for college students, a middle school summer enrichment program, as well as numerous educational programs. Overall, DDC STEAM has served over 1,500 students since its inception.

"DDC selects highly motivated students from every borough, teams them with interested and accomplished professionals, and provides them with the tools to understand how to build for the benefit of New York City," said Acting Commissioner Barrio. "Demand for workers skilled in technical fields continues to grow. In the future, some of these students may return to careers at DDC."

Deputy Commissioner Lee Llambelis stated "Our last class of interns left a very positive impression on us," said DDC Community Partnerships & STEAM Initiatives Deputy Commissioner Lee Llambelis. "We witnessed them grow in a variety of ways, from learning how to draw blueprints, to becoming adept at Excel, to developing networking skills. We're extremely excited to see what this next cohort of interns can learn from their experience at DDC. They are a very impressive group of young people."

This is the third year of DDC's High School Summer Internship program. There are 14 males and 14 female students in the 2017 intern program, representing each borough and 24 different high schools.

Each intern is assigned a personal mentor from a DDC division, including Administration, Architecture & Engineering, Community Partnerships and STEAM Initiatives, Infrastructure, Office of the Chief Architect, Law/General Counsel's Office, Program Management, and Public Buildings.



NYC DDC Acting Commissioner Ana Barrio send row (center) pictured with the 2017 Summer High School Interns and their Supervisors.



DDC STEAM Deputy Commissioner Lee Llambelis welcomes the 2017 High School summer interns.

# **SPECIAL EVENTS**

# **COMMUNITYSERVICE DAY**

On July 25, 2017, New York City Department of Design and Construction's (DDC) STEAM Division – in partnership with the Learning through Expanded Arts Program (Leap) nonprofit education organization, New York City Department of

Youth and Community Development (DYCD), the New York City Department of Education (DOE) - hosted a Community Service Day at J.H.S. 22 Jordan L. Mott on East 167<sup>th</sup> Street in the South Bronx. The High School and College interns participated in the event, along with the J.H.S. 22 middle school students.

Community Service Day promotes neighborhood engagement and the importance of collaboration and teamwork. The interns participated in various activities and the significance of experienced connections and role modeling as a big brother or sister for the younger students. They were able to give back to the community and inspire others to take pride in their city.



Acting Commissioner Ana Barrio in the (Center Middle) High School and College Interns before heading to MS 22.

The High School and College Interns were split into three groups and each group participated in a specific activity with the middle school students from the Leap organization. The first activity was a vertical gardening activity which consisted of three stations; a seeding station, a harvesting station, and a utopian station. At the seeding station, students place soil onto seed flats and planted seeds in them. The next station contained a mixture of seeds, such as lettuce and spinach, harvested from vertical gardens. Finally, at the utopian station, the participants learned how vertical gardens can help ease farming in an urban scape without the need of a large amount of space. The students also learned about the five



categories of food justice: availability, affordability, accessibility, adequacy, action and how each can help create a thriving sustainable food system.

Interns and middle school students also had the opportunity to put together survival kits for Teacher Appreciation Day. The kits will be given to the J.H.S. 22 teaching staff when they return to school for the Fall 2017 semester.

The final activity consisted of a basketball tournament. Our interns demonstrated their athletic abilities on the court. A good time was had by all.







erns exploring 3D Design with 3Doodler pens. Interns line up for photo opportunity at the Staten Island Willowbrook Park.



Sheldon Avenue BMP Project, Staten Island



The resident alligator at the Hunter Avenue BMP Project in Staten Island.



Interns participate in a team building exercise.



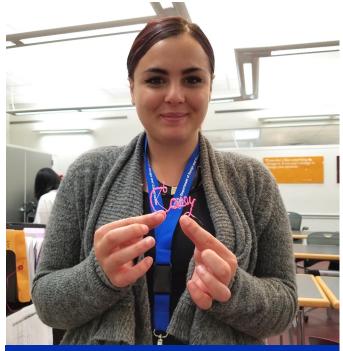
Interns collaborate to engineer a sound structure using index cards.



Interns enjoying their lunch period at the Staten Island Willowbrook Park.



Sheldon Avenue BMP Project, Staten Island



High School Intern Casey Ferenc shows her 3Doodler creation.



DDC summer interns participate in Community Service Day at JHS 22.



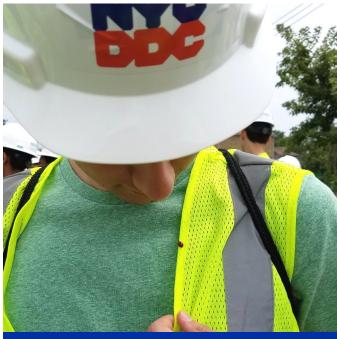
High School Interns enjoying lunch together.



High School Interns testing their index card towers.



High School Interns working together to create models of existing Public Buildings and Infrastructure projects.



High School Intern at the Staten Island BMP Site discovers a ladybug on his vest.



High School & College Interns bonding on Community Service Day.



High School Intern working on tasks provided by his supervisor.



High School Interns greeting Acting Commissioner Ana Barrio.



High School Interns bonding at the BMP Staten Island Construction Site.



High School Interns enjoying lunch together.



High School Interns creating a 3D model with a 3Doodle Pen.



High School Interns testing their index card towers.



#### Elizabeth Akom - Wiredu

During my time at the Department of Design and Construction, I had the opportunity to work with Kristina Kesler, Melissa Santana, Jaime Fournier-Ferra, Camil Malouf and many other amazing people. There was something new to do every day. Melissa and Camil provided me with the opportunity to learn about hand renderings and measurement specifications. Jaime taught me the importance of colors and various concepts to consider when building for different communities. They encouraged me to ask lots of questions and were open to answering anything. I am grateful for the warm work environment and for everything that they taught me. I am glad I had this experience because the people I met helped me grow. I hope to see myself working with them again in the future.

#### **Keaira Arthur**

I would like to thank my supervisor, Ms. Lorraine Holley for the continuous support this summer. She embodied the role of supervisor with grace and diligence. The informative conversations, our enlightening debates and her detailed filled comments, which covered all necessary points, displayed her drive to have me learn and gain as much as I could from this internship. When the days were slow she found work for me, when I was unsure of myself Ms. Lorraine provided me with support, and when I felt unable to complete a task she pushed me to get it done. Many days I didn't want to leave the office, despite the long commute, because I wanted to absorb all the information she was sharing with me. She has been a huge factor in my thought process and in choosing a career. She has shown me that with a strong team, such as the ACCO team, anything can be accomplished.

#### **Peter Beltrami**

I would like to thank my supervisor, Engineer in Charge Andrea Nunez, for everything. She has taught me many things during my time here at the Department of Design and Construction. I had the opportunity to learn about the history of the agency, and assist DDC staff members with project management tasks. I even learned how to read blueprints and was able to explore and learn more about architecture and its importance to New York City. Ms. Nunez was a wonderful person to work with because she was very down to earth. Thank you for the amazing experience!

# **Brianna Bernard**

I am grateful for my supervisor, Borough Outreach Coordinator Lisa Robbins, from the OCON Unit, as well as Elizabeth Bejarano, Nareesa Nabibaksh and Jennifer Lester, all of whom have all been wonderful to me. Working alongside them, I participated in office meetings and assisted with project reports. One important thing Lisa has taught me is that no matter what I want to do, I can achieve anything if I work hard. She emphasized it is not always difficult to chase your dreams, you just have to work harder when you think you cannot make it. Thank you so much Lisa!

#### **Patrick Bietsy**

Jessica Hollis and her colleague Goutam Kundu have given me the most amazing internship experience in the Information Technology Services Unit. Jessica is kind-hearted and always looked after me ensuring I felt comfortable in the work environment. She would always brighten my day with her funny jokes. Goutam Kundu was the best at Information Technology Services and would always help when there was an issue. This unit is crucial to the agency and there was high demand of work. He let me complete tasks independently and was there to help when needed. I'm sure he is a genius, because he understands every problem and knows how to fix it on the spot. Mr. Kundu is a true role model to look up to and a phenomenal mentor. It was a great experience getting to know my supervisors. This internship was a wonderful experience because of their guidance.

#### **Essience Cheeks**

I was assigned to the Infrastructure Division, where I networked with DDC staff members. I learned about how the agency's work improves the lives of the New York City community. I had the opportunity to work with Herve Carrie, an Infrastructure Director of Program Administration. He took the time to arrange visits to various meetings DDC participates in so that I could become familiar with how DDC builds NYC. I also had the opportunity to learn how to research properties using lot and block numbers in order to gather and disseminate important information to contractors. I have truly enjoyed my time here at DDC and I hope to continue to work with everyone!

# **Philip Cina**

During my time at DDC I worked in Public Building's Architecture and Engineering Unit a.k.a. In-House Design under Architect Kristina Kesler. Kristina was a great mentor and willingly took me under her wing. I was given the opportunity to observe things I had never seen before. I analyzed floor plans, read blueprints and expanded my knowledge of C.A.D. My previous experience with AutoCAD benefited me greatly. With her help, I was able to both enhance my skills and learn new skills. I enjoyed my time with Ms. Kesler and appreciate all the help that given to me. Thank you, Kristina Kesler, for an amazing internship experience. This experience will help me become a better civil engineer in the future.

#### **Geovanni Colon**

I was introduced to a new world of technology during my summer at DDC. I became more efficient while completing the tasks given to me by my supervisor. All the staff in ITS made my experience very enjoyable. I am grateful for the time Donna Lynn and Jessica Mendez spent instructing and guiding me through during my time in the Information Technology Services Unit. I now know how to troubleshoot computers, identify the exact issues, and find appropriate solutions. Dave gave me great networking tips, while Goutam showed me how computers are imaged and set-up. Everyone gave me guidance and helped make the IT world a concrete part of my future. I am thankful to Ambu, Jamel, Alex, and so many others. I would like to thank the entire Information Technology Services Unit for a wonderful experience. I'm especially grateful for the opportunity to return to DDC to work for another summer.

#### **Mohamed Doumbouya**

I would like to thank my supervisor, Barry Vanterpool, Director of Construction & Reimbursement, Liaison Karin Louie, and the Budget and Finance College Aide Michelle Asim for giving me a great learning experience during my time at DDC. Barry, I feel very fortunate to have had you as my supervisor. I enjoyed attending meetings with the team because it gave me valuable insight that will help shape my future career goals. Karin, I enjoyed the site visits and the guidance you provided. I was able to gain a first look into the design and construction industry of New York City. Again, thank you for a great learning experience!

# **Jovan Duncan**

I am thankful to have worked with my supervisor, Information Technology Services Help Desk Technician Jessica Hollis and ITS College Aide Jamel Helwig. They taught me the professional etiquette needed to help others around the agency and motivated me to work efficiently and effectively. I made a very big improvement from the day I started at the agency until now thanks to their guidance. I learned how to troubleshoot, install, and reboot computers. They made it enjoyable with their smiles and laughter daily. Thank you Jessica and Jamel for a wonderful summer!

#### Za'Kilya Faison

During my time at DDC, Ms. Sunita Baksh was my direct supervisor. I was very lucky and I am grateful to have had the opportunity to work for her. She introduced me to many individuals in the unit and they gave me the opportunity to work on different administrative tasks and taught me a great deal about the unit. I had first-hand experience seeing how Human Resources and the Timekeeping unit coordinate to help successfully manage DDC staff. I assisted Mike and Kim with file organization and Shana Hitt with research, data analyzation, and graphic design. Winifred Corton taught me how to sign my emails professionally and the importance of file organization and keeping copies "just in case." She also taught me how to communicate with other agencies and corporations when DDC has job openings and how to use Microsoft Office for the unit's management. In addition, Virginia, Shaundel, Patricia and Helen assisted me around the unit. When I completed the tasks for my director supervisors, they provided me with supplemental tasks and taught me the ins and outs of their roles in Timekeeping and Payroll. I am grateful that I was placed in this division, I learned so much about the one of the crucial units at DDC.

#### **Casey Ferenc**

I would like to thank my supervisor, Public Buildings Division Administrative Officer Janice McDonald, for being very helpful in setting up networking opportunities with built environment professionals so that I could gain exposure to the different disciplines that contribute to how DDC builds New York City. Janice ensured that everything went well for me on a daily basis. I would also like to thank Program Director of Transportation Afsar Samani. Because of her I was able to attend meetings and visit many construction sites. Office Engineer Cynthia Stuart and Project Manager Intern Adanfa were also very kind and helpful. They introduced me to staff around the office and took me to construction sites. I am extremely thankful and appreciate of all your hard work!

#### Mariana Heredia

I would like to thank Janice McDonald, leva Vanags, Steven Leung and Woon Lam for guiding me through this amazing opportunity in the Public Building's Cultural/Parks Program Unit. During my time at DDC, I have learned so many things that will be extremely valuable to me in my future career as an engineer. I have learned how to read engineering plans for different types of sites. Ieva taught me how the architectural scale translates from the drawing to real life, as well as, how to use engineering and architectural scale for drawings. I now understand the long process from start to finish of a construction project. The process is always filled with change orders, requests for information and lots of detailed summaries. Once I understood how to complete it and its importance, I had fun creating a bid breakdown. I am thankful to have been mentored by such skilled group of built environment professionals.

#### Wilmer Hernandez—Lino

I would to thank my supervisor Janice McDonald for all she has done for me during my internship here DDC. Although I did not have the chance to work with her daily, she always made sure myself and the other interns in my unit were comfortable and enjoying our experience. She gave me a piece of advice that will always stick with me, "If you want something go after it. You have to fight for what you want." Kenneth Petrocca was another great supervisor. It was amazing to see all the work he and his team put into the Build It Back project after Hurricane Sandy. I would also like to thank Pilar Ramirez and Hiba Hadeed. They gave me insight on the engineering aspects of DDC. They introduced me to elevation, floor, and demolition plans. I am very thankful for all they have taught me in the architecture, engineering and construction fields.

# **Bihong Hu**

During my time in the application division of the ITS department, I was honored to have worked with Tatyana Plashkova, Christopher Esposito-Bernard, and Rosa Perez. Rosa kindly introduced herself to me and her friendliness made me feel comfortable in a new environment. Tatyana provided me with a better understanding of pedestrian ramps and taught me about the structure of the pedestrian ramps, their importance, and how to investigate pedestrian ramps using Google Maps. When I had questions about my tasks, Christopher demonstrated his willingness and patience to resolve my questions. In this internship, they taught me the skills necessary to become a responsible and successful architect.

#### **Tina Lim**

I would like to thank my supervisors, Public Art Manager Dora Blount, and Percent for Art Program Deputy Director Xenia Diente for introducing me the process of how Public Art is incorporated into DDC Projects. They taught me about the importance of public art and programs like Percent for Art. This program ensures that at least one percent of a construction project's budget in capital projects are used to commission art. I learned about the impact of art on public buildings and its significance to the community. My supervisors gave me the opportunity to review previous and current commissioned works of art which I truly enjoyed. I'm extremely thankful to these two individuals who offered such an amazing experience for me during this summer internship.

# **Tavon Pugh**

Working under Opeoluwa Taylor I gained many new skills while enhancing those I had prior to this internship. Ms. Taylor taught me how to work efficiently and proficiently in the workplace. Jacqueline Abel introduced me to the many tedious steps of construction starting from the bidding by different construction companies, to the selection of the company that would be used to complete the DDC project. Ms. Abel explained how DDC determines which company will complete the job with the best quality, within the price range set by the agency. She also showed me how to read a bird's eye view of a construction map and explained how construction workers know what to destroy or how to improve the building they are working on. During our weekly meetings, Janice McDonald gave me advice on simple ways I could improve my internship experience over the summer. Janice and all my other supervisors were a great support system. I enjoyed every single day working with them as they introduced me to a world I did not know existed before this internship. They opened my eyes to new career paths that I may wish to pursue later in my career. I am very grateful for all of my supervisors for all they have done and introduced me to. I would like to say thank you from the bottom of my heart for a wonderful internship experience.

#### Sarah Saad

Throughout the internship, I've worked in the Public Building Division with Division Administrative Officer Janice McDonald and Senior Project Manager Jacqueline Abel. Thanks to them, I've learned how to create and edit gantt charts, create budgets, understand floor plans, and make project fact sheets. Also, while working with Rocket Osborne, and Shaima Rizvi I learned how to write memos to the Engineering Audit Office and organize documents. They all are immensely kind and focused and they always made sure to help wherever they could. I would like to especially thank Jacqueline for giving me amazing advice and always going out of her way to help me gain experience and the opportunity to learn as much as I could. Thank you also to Janice McDonald for giving me the opportunity to experience several new fields. The time I've spent at DDC has been invaluable and the experience with all my supervisors was marvelous. Thank you DDC!

# **Manjot Singh**

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# **Aristos Smirniotis**

I am grateful to have worked with Kristina Kesler, Melissa Santana, Adam Schifmacher, Melissa Benitez, and Jamie Fournier-Ferra in the Public Buildings-In house design unit. I've learned from Kristina that hard work pays off. Melissa Santana taught me more about drawing than I could have learned on my own. She was very enthusiastic and shared her knowledge of CAD with me as well as her college experience. Adam helped break down any difficult steps that I needed help with and he explained the process of precedent studies to me in a simplified manner. Melissa Benitez showed me different drawing specs on different programs such as Revit. I appreciated her help and sight when she explained her project assignments. Jamie Fournier-Ferra helped me understand that even internships involve hard work. I was especially fascinated with his insight on the concept of "color" and the deeper meaning behind color. I am thankful for all of my supervisors and for everything they have taught me this summer.

#### **Brandon Stewart**

During my time at DDC, I had the opportunity to work with Infrastructure Engineer in Charge Thomas Leung. I was able to observe what his day-to-day workload is, including the many different projects that he works on throughout the year. He took the time to teach me Microsoft Excel and emphasized how valuable it is in the engineering field. He also gave me great advice on what to do and what not to do in terms of career paths and my future. I enjoyed working with my supervisor especially because he made the work environment less tense and more relaxed. He also encouraged me to interact with other professionals within the unit to get a feel of what their jobs are like. This has been a great experience overall and I appreciate the opportunity he gave me.

#### Selena Tan

I would like to thank my supervisor, Director Landry Philemy from the Infrastructure Division's Program Administration Unit for the opportunity to experience an insightful and wonderful internship experience at DDC. Every day, Director Landry ensured that I was learning and working to my fullest potential. I am grateful that he always set aside a portion of his day to thoroughly answer my questions and teach me about professionalism in the workplace. I am grateful that Director Landry introduced me to so many other amazing DDC staff. I also worked with Luis Garces, Loan Murray, and Shefalee Patel. As an intern under their patient guidance, I was constantly exposed to and fascinated by the work and responsibilities of civil and environmental engineers. They taught me that passion and dedication are just as important as education in ensuring success in one's career. I can wholeheartedly say that my summer was well-spent at DDC!

#### **Fatoumata Tavele**

I have learned a lot working with my supervisors Jessica Hollis and Lorraine Bucknor. I had the opportunity to work with Geographic Information Systems and budgeting within the Information Technology Services Unit. I started my internship in the GIS subunit but I wanted to get more experience learning how the unit has to budget their purchases. When handling money I learned everything must be recorded. I also learned how to proficiently record purchases, manage spreadsheets, and keep track of all receipts. I spent a lot of my time working Lorraine. She is genuine, strong, and independent. There were times when our work was complete we would laugh and talk about my future. She took the time to share personal and professional advice with me. I would like to thank Lorraine and Jessica for a wonderful experience.

# **Angelica Vasquez**

During my time at DDC, my supervisor was Jenny Lai the Director of Health and Safety in the Human Resources Division. There was never a time when Jenny wasn't warm and welcoming. She made me feel extremely comfortable inside an unfamiliar government building miles away from home. Jenny also provided great life advice during our morning "decompression" time. Every morning she gave me great advice and new factors to think about in my life journey; such as which college to attend, what kind of career to pursue, how to balance one's work and family life, to name a few. I can confidently say Jenny Lai has given me a lot to think about and has significantly impacted and changed my future goals. I give her advice great weight. All the guidance she provided was based upon her own life experiences and she was more than happy to share with me. I can say Jenny made the long commute from Staten Island worth making and my time at DDC a very memorable one! Thank you so much Jenny!

#### Lucy Xu

I would like to thank my supervisors Director Nitin Patel, Project Engineer Alejandro Perez De Leon, Engineer in Charge Charles Mckearnin, Project Engineer Frank Chen, and everyone else on the team who welcomed and greeted me whenever I passed by. During my first day of work, Nitin made me realize how electrical engineering, which is what I will be majoring in, intertwines with the work of civil engineers. He explained how overhead power lines, which electrical engineers deal with, are supported by structures designed using civil engineering. As the days went by, I learned about Construction Project Initiations and how they are bid to consultants who then present technical proposals to DDC. DDC then produces a task order for the selected consultant. I have also gone through photo logs, tree inventories, and learned about the multiple aspects of engineering drawings. I have utilized my time wisely during this internship because of the support of my supervisors. They were all eager to instruct and provide me with work so I could be exposed to as much of their work as possible.

# **Andrew Yamraj**

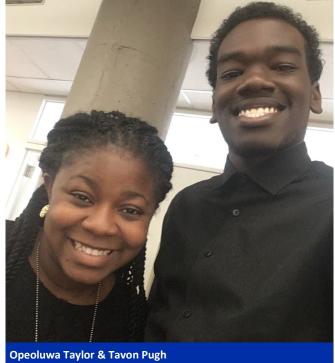
I would like to thank my supervisor Ralph Wuest a Director of the Infrastructure Division for his guidance during my summer in the DDC High School Summer Internship Program. I also had the opportunity to work with Sky Jules, a Deputy Director in Infrastructure. I truly appreciate how welcoming and friendly they were during my time here. Mr. Wuest is a positive force behind his team, and he always made me feel like I was a permanent member of the team. Ms. Jules also gave me a great piece of advice to "always bring at least 10 flash drives". Thank you Mr. Wuest and Ms. Jules!

# **Zhengyang Zhu**

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Xenia Diente, Shahrin Haque, Dora Blunt, & Tina Lim

Wilmer Hernandez—Lino & Tatiana Vargas



High School Interns pose with their supervisors in Public Buildings A&E



Sarah Saad & Jaqueline Abel



Kenneth Petrocca & Wilmer Hernandez—Lino



leva Vanags & Mariana Heredia



**Thomas Leung & Brandon Stewart** 



Landry Philemy & Selena Tan



Lucy Xu & Alejandro Perez De Leon



College Interns Joyce Chan, Meraj Choudhury, Hamidur Rahman, Maria Liriano and College Aides Suellen Fonseca, Monique Jacob, and Shakiesha Featherstone



Aristos Smirniotis & Melissa Santana



Lisa Robbins & Brianna Bernard



Lorraine Bucknor & Fatoumata Travele



**Mohamed Doumbouya & Barry Vanterpool** 



High School intern Brianna Bernard and College interns Joyce Chan, Meraj Choudhury, and College Aide Suellen Fonseca



Jenny Lai & Angelica Vasquez



**Information Technology Services Interns and Supervisors** 



Za'kilya Faison & Sunita Baksh



High School Interns & College Intern Meraj Choudhury



Casey Ferenc & Afsar Samani

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Department of Design and Construction