

# 2018 HIGH SCHOOL SUMMER INTERNSHIP PROGRAM



Department of  
Design and  
Construction





# NYC DDC 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.

2018 is the fourth 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, interview skills, resume writing, networking, college application process, and an Introduction to Virtual Reality technology. 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 NYC DDC.

-|-

*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.*





# Lorraine Grillo

Department of Design and Construction  
Commissioner

Dear High School Summer Interns,

Congratulations on completing the 2018 High School Summer Internship Program at the New York City Department of Design and Construction. Our partnership with the Department of Youth and Community Development (DYCD) and the Administration for Children Services (ACS) started in 2014 to provide high-performing students like yourselves with the opportunity to gain a foothold in the pursuit of professional careers in science, technology, engineering, architecture/art, and mathematics. The lessons you have learned this summer from DDC professionals will travel with you throughout your lives, and you should call on them as you encounter future challenges.

You should be proud of all that you have accomplished this summer – I know I am. You have been tremendous assets to our agency, assisting throughout the agency in areas such as Infrastructure, Public Buildings, Program Management, Office of the Chief Architect, Administration and Human Resources. Your eagerness and your enthusiasm have brightened our offices as you completed your assignments and contributed greatly to the agency.

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 and we wish you the very best.

All the Best,

A handwritten signature in black ink that reads "Lorraine Grillo". The signature is written in a cursive, flowing style.

Lorraine Grillo  
Commissioner





# LILLIAN "LEE" LLAMBELIS

DDC Community Partnerships + STEAM Initiatives  
Deputy Commissioner

To Our High School Summer Interns:

Congratulations on having successfully completed the High School Internship of the NYC Department of Design and Construction. Over the past several weeks, you have done some amazing work and learned some valuable lessons. You should be very proud of your accomplishments. I certainly am.

This is the fourth year of the DDC's High School Summer Internship Program and if the experience of our past students is any indication, you will look back on this summer as an important milestone in your life. Working side by side with your dedicated supervisors, who have shared their knowledge and provided support in countless other ways, you have gotten a close-up look at some of the most exciting emerging technologies. You learned to use Virtual Reality technology as a story-telling tool, which allowed you to illuminate your personal vision of community, and you saw how this innovative technology is being used in the built environment.

You have been an incredible class, meeting or exceeding our already high expectations. You have learned how DDC professionals build New York City's civil facilities, and infrastructure and you have developed essential skills that will help you succeed in the future as built environment professionals. Your passion, skills and talent will prepare you for future professional and educational opportunities.

I hope that you continue to explore and take advantage of the numerous opportunities available at DDC. I am confident that you can overcome any obstacles you face. It has been an honor to work with all of you here at DDC. We wish you the best of luck in your future endeavors.

All the best,

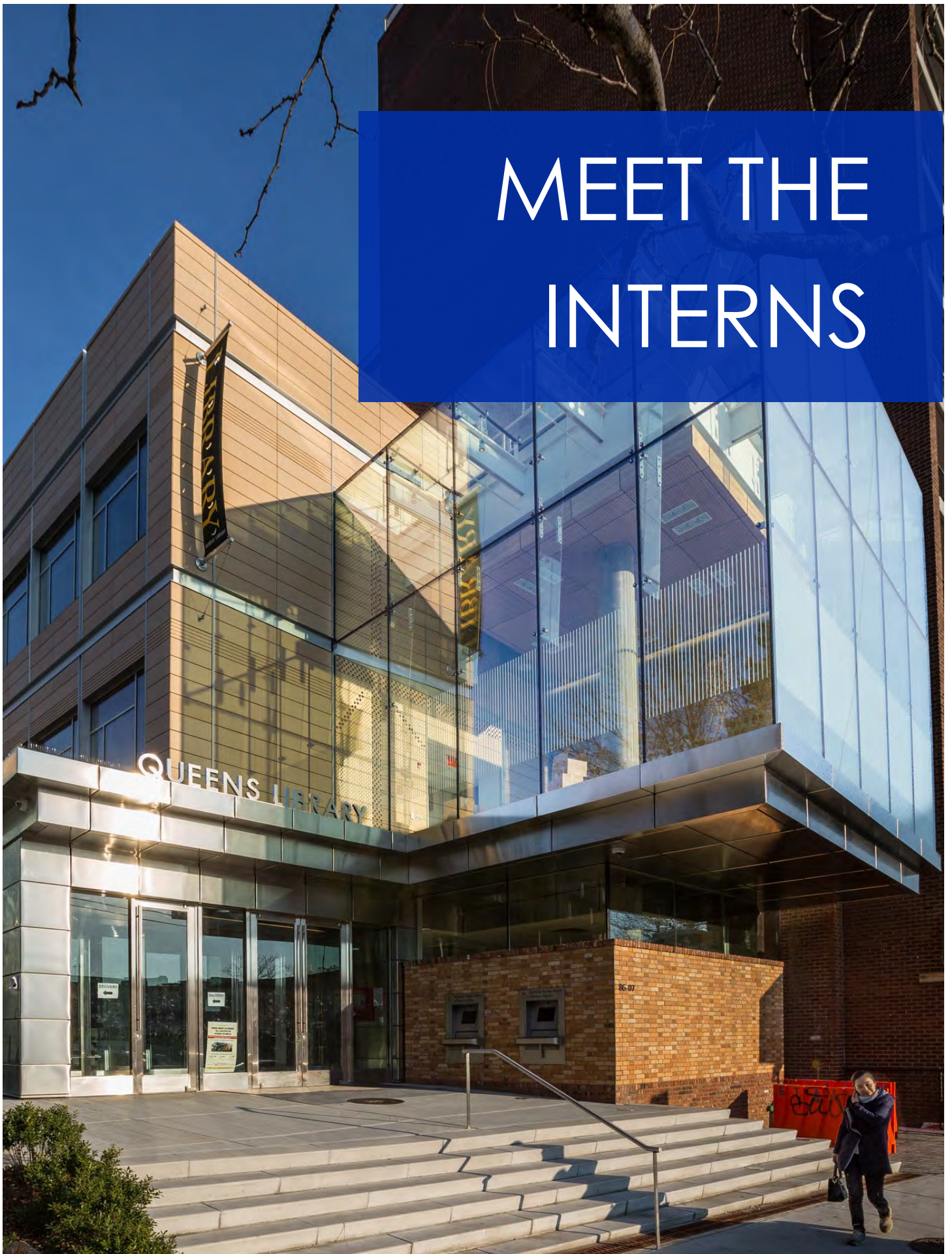
Lillian "Lee" Llambelis

Deputy Commissioner





# MEET THE INTERNS





## Jensen Andre

Medgar Evers College Preparatory School

Information Technology Services | Project Management

I am a rising senior at Medgar Evers College Preparatory School who is interested in physics and computer science, because they involve rigorous mathematical calculations. Over the course of the DDC summer internship I have been able to explore the many different aspects of Information Technology Services. ITS is divided into several subunits: Help Desk, Programming, GIS, and Networking. Initially I was placed into the Programming Unit, where my supervisor Janusz Wojciechowski assigned me to work alongside Subhash Mathew to help develop a new software application. Subhash then gave me the amazing opportunity to work with some of the other ITS interns. I came with knowledge of Java, but when working on the Site Safety App, I had to learn three additional coding languages: JavaScript, HTML, and CSS. It was challenging, but also fun and exciting. I learned about the many different aspects of networking and communication. This varied from simple network setups to managing the wiring of numerous ports in the largest server room in the DDC building and even taking apart and rebuilding a computer desktop. My wonderful supervisors in the ITS department taught me many practical skills that can be used to troubleshoot daily computer encounters. The atmosphere at DDC is very professional and encouraging. My experience this summer has given me many new skills and the confidence that I will be prepared for the work environment.



## Marueen Awad

Port Richmond High School

Public Buildings | Executive

I am a rising senior at Port Richmond high school. Architecture and engineering had already caught my interest thanks to my participation in the ACE (Architecture, Construction, and Engineering) Mentoring Program. Prior to my internship at DDC, I was unsure of which field of architecture (or engineering) I should pursue in college, but thanks to my amazing mentors at DDC I now have an idea of what the different aspects of engineering are all about. Not only was I exposed to Building Information Modeling, I was also able to speak with professionals in the built environment and gain practical knowledge of the fields of design and construction. My experience at DDC has been invaluable.



## Nicole Betances

The High School of Fashion  
Industries

Office of the Chief Architect |  
Design Strategic Initiatives

I am a graduate of Fashion Industries High School. In September, I will be attending the University of Southern California to study architecture. I was born in the Dominican Republic and my interest in architecture goes back to when I was around eleven years old. I always thought that creating a home or structure was such an amazing thing. I started enrolling in art and design programs and decided to apply to DDC's High School Internship. I was assigned to work with the Strategic Initiatives Unit in the Public Buildings Division. We are currently doing research on how to make buildings more accessible. This internship has helped me realize that the function of a building is just as important as its aesthetics. I've also met several architects that have given me career advice on how to succeed in the future. This program has helped me get extremely excited for college and my future career in architecture.



## Patrick Biesty

Leon M. Goldstein High School

Information Technology Services |  
User Support

I am a rising freshman at Stevens Institute of Technology and this is my second year in the program

During my freshman year in high school, I joined the Robotics team, where I developed an interest in engineering and graduated as 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/electrical team did until I was exposed to DDC S.T.E.A.M. Having a general knowledge of coding languages allowed me to become a well-rounded president for my last year heading the club. While interning at DDC, I was assigned to the Information Technology Services unit where I was able to learn more about other types of engineering. This unit is crucial to DDC because they manage the agencies technology needs. DDC is filled with intelligent and kind people. I am very grateful for this internship; it has been a wonderful opportunity especially because now I plan to study computer engineering in college. These past two summers have been the best and also the most influential ones of my life.



I am a rising junior at Bard High School Early College in Queens. I enjoy hands-on tasks such as organizing data and working with numbers. This summer I wanted to explore the S.T.E.A.M. fields, and DDC's Summer Internship Program gave me the opportunity to work in the agency Finance Division. It was a new and eye opening experience. I had never taken an economics class before. However, because of this internship, I am encouraged to study finance and am now learning how to create pivot tables on excel and inputting data into systems. I have also had the opportunity to speak to many successful S.T.E.A.M. representatives, participate in VR workshops, and visit DDC construction sites. These experiences have taught me much that I hadn't known about S.T.E.A.M. fields of Architecture, Construction, and Engineering. I'm grateful to the DDC S.T.E.A.M. team for giving me this opportunity.

## Erica Chen

Bard High School Early College  
Queens

Equal Employment Opportunity  
Department  
Administration | Capital Budget,  
Payments and Grants



I am a graduate of Art and Design High School. I aspire to become a professional architectural designer and will be attending City College in 2019. I come from a family who are focused on business and law enforcement. I decided to attend an art focused school and take a gap year before college. Many people tried to discourage me from doing so because they thought I didn't have a plan. Their perspectives shifted once they realized I had worked hard, including working part-time at an architecture firm and later getting accepted into the department of Design and Construction's High School Summer Internship Program. Working in DDC's Public Buildings Division has only enhanced my love of design, the experience working in a city agency has opened my eyes to all of what there is to do as an architect, from curating a library from scratch, to design talks with fellow women of STEAM, to flipping through finalized architecture books. My internship at DDC has been a very productive way to spend my summer.

## Lorraine Colbert

Art and Design High School

Public Buildings | Architecture &  
Engineering



I am a rising senior at Medgar Evers College Preparatory School. Ever since I started High School, I knew I wanted to work within IT, When I heard about the DDC Internship program, I was excited because the program would help me learn more about the IT field. Guest speakers from DDC spoke to us about their jobs and how they got to their positions. I learned a great deal from the knowledge and advice they shared. I have also learned skills that will help me get the job in the future. My supervisors in the IT division were Sabrina Lightburn and Karen Butler. Karen taught me about an IT app called “Track-It”. With that app, I learned a portion of the IT technician’s job. Sabrina taught me how to use different type of tools in Microsoft Excel. With Microsoft Excel I learned how to do data entry. The program was very educational and helpful in achieving my long-term goals.

## Shamel Crosland

Medgar Evers College Preparatory  
School

Information Technology Services |  
Application Support



I am a rising senior at The James Baldwin School in Manhattan. My career goal is to become an architect. My internship at DDC has pushed me within arm’s reach of my dream. I’ve met many wonderful people who share my interests and from whom I have learned a great deal. I have been exposed to many things in the Architectural, Construction and Engineering fields that aren’t readily available to students my age. I could not have asked for a better way to spend my summer. My internship at DDC was successful and amazing. I wouldn’t hesitate to apply again.

## Quansae Herring

Passages Academy

Information Technology Services |  
GIS



## Fatin Iftkhar

Brooklyn Technical High School

Information Technology Services |  
Networking

I am a rising senior at Brooklyn Technical High School. Throughout my education, I have explored multiple fields including software, computer engineering, and pharmaceutical sciences. Working in DDC's ITS division, I was able to apply my knowledge of software and hardware to help my supervisors maintain network connections within the building. This included running wires through the building, building computers, and learning how the network functioned. My time was spent making sure that everyone could do their work efficiently, which I found was both an important and a fun task. I was also able to engage in many team-building exercises that taught me how to work with others and appreciate their ideas. Working with the other interns was motivating and gave me a strong sense of community because everyone was always so helpful and friendly. This internship also gave me the chance to learn more about other interests of mine like architecture and engineering. Because of this experience, I have become more well-rounded individual and I am thankful for all that I have gained from this summer experience.



## Mohammed Islam

Bronx High School of Science

Infrastructure | Design 2

I am a rising high school senior at the Bronx High School of Science. When I was 4 years old I immigrated to America from Bangladesh. Interning at the NYC DDC has honestly been a dream come true, as well as a life changer. The work done here is beyond incredible. Every day I am presented with a unique set of challenges. Some of my best experiences have been discussing design plans with individuals, attending meetings with representatives from numerous corporations (D.O.T, D.E.P, AECOM etc.), and getting to work on my own personal project - an advanced inspector drone I am calling the "PRI-MO COPTER INSPECTOR". One of the best things about this internship is that I am walking away with greater knowledge than I could have ever dreamed of! I did not know that interning at DDC meant improving my designing skills tenfold, learning about AI and VR in the building process, and taking fascinating trips to DDC worksites. Aside from the work, I would say that the atmosphere is probably the best part of the job. Everyone here is welcoming and they value my input. As a DDC High School Intern who has experienced only some of the wonders of this agency, I can say it was a summer well spent. I would recommend the NYC DDC summer internship to every high school student. If you want to learn more about how to build this city, come to DDC ASAP! Trust me, it's worth the trip.



I attend John Bowne High School. When I started this internship, I didn't know what I wanted to do. The program has provided me with many great opportunities. I wish to gain greater knowledge and understanding of S.T.E.A.M and community partnerships. This unit really stands out because they help to build the community that we live in. I am open to learning about the many different fields at DDC. Currently I am working with the FLEET division creating and inputting information on to a data base and helping my supervisor manage the agency fleet of cars. This internship has been a good opportunity to learn about many careers and shed some light on what I would like to do in the near future.

## India Jones

Samaritan Village Restart  
Academy (John Bowne High  
School)

**Administration | Operations &  
Facilities Management**



I am a rising senior at the Frank Sinatra School of the Arts High School. This summer I worked in the Architecture and Engineering Unit of the Public Buildings Division at DDC. Through this internship, I have learned about the many symbols used on floor plans, sustainable energy sources that are used on many city projects, and how HVAC systems operate. Through DDC, I was given incredible engineering opportunities, including various workshops on topics such as Virtual Reality (VR), drafting, and video editing, all for free. STEAM activities, trips, and lectures have taken me across the boroughs to places and communities I never thought I'd visit. The trip to East Flatbush, for example, presented me with a neighborhood and community I had never imagined, full of people, kittens, and mom and pop shops. Meeting people through DDC with backgrounds from M.I.T. and Niantic really helped open my eyes to careers I had never really considered. I now realize that programming VR could be a job and not just a hobby. This has increased my interest in minoring in VR in college. This internship has changed my perspective on how businesses are run and has taught me more than I ever knew about project management, budgeting, and even completing crossword puzzles.

## Olivia McLernon

Frank Sinatra School of the Arts  
**Public Buildings | Executive**



## Wengelyn Muñoz

Manhattan Center for Science and Mathematics

Public Buildings | Executive

I am a rising senior at Manhattan Center for Science and Mathematics. I have always been curious about the world around me and would find ways to make my own contraptions, decorations, and accessories out of any available materials. My profound interest in design followed me to school where my talent in math would begin to play a large role in intensifying my creativity. Recently, I came to the realization that I am passionate about architecture and its ability to capture my interest in both art and math. Participating in DDC's High School Summer Internship Program has solidified my interest in becoming an architect and has exposed me to many aspects of the field of architecture. I have had the opportunity of working with DDC professionals who have taught me about floor plans, cost estimates, bids, VR, and the step-by-step processes that every project goes through. I have also been exposed to the computer software programs used in architecture and engineering and have worked to create specific figures and my own floor plan. The best part about being an intern at DDC is all that I have learned from simply having conversations with DDC professionals about their careers. I have gained insight from the professionals who are in the positions that I aspire to be in the future.



## Ana Maria Oliyntyk

Fort Hamilton High School

Infrastructure | Design 2

Opera performance, songwriting, visual arts, photography, and environmentalism are personal passions that shape me as a person and have made the career decision process an exciting, but also a very wild ride. I knew I wanted to influence change to better our environment, and to employ the arts in doing so. Through environmentalism I discovered landscape architecture, which is an ideal marriage of nature and the arts. Working at DDC has allowed me the opportunity to see the profession through the eyes of reality rather than through my romanticized perceptions. Realizing that I need a job that will allow me to be active, I had swapped years worth of passion for landscape architecture and a fresh plan – environmental engineering. With this newly found future career option, I can create innovative solutions to modern environmental concerns, and also employ the arts to engage in advocacy. It only took two weeks at DDC for me to realize that I had been looking too far for the ideal career.

My experience at DDC was one of the most eye-opening and enriching opportunities. Walking the streets, now I am aware that every detail exists for a reason and was implemented after considerable thought. Who would have thought that every tree on the sidewalks were once just part of a sketched plan?





## Allan Raposo

Manhattan Bridges High School

Information Technology Services |  
GIS

I'm a rising senior at Manhattan Bridges High School. Coming from a Dominican family with limited background in science and engineering, I saw the DDC High School Internship Program as a great opportunity to learn more about careers in Architecture, Construction, and Engineering. This internship has given me the ability to network with a large number of Architecture, Construction, and Engineering professionals, and college and other high school interns in various areas of STEAM (Science, Technology, Engineering, Architecture & Mathematics). DDC not only provided me with insight into many possible career paths available in STEAM professions. The working professionals who served as my supervisors also shared their personal experiences and spoke about the challenges they had faced. This program also allowed me to be introduced to like-minded students. It has been a terrific experience which has also helped me develop hard skills and proficiency in the use of Autocad and GIS mapping. I am grateful to have worked with my supervisors: Cherian Poopalil, Nicole Harvey and Rosa Perez. I would also like to thank the STEAM team for all the work they put into making this a fabulous experience that is beneficial to me education. This wonderful summer experience would not have been possible without them.



## Michael Rosenbaum

Institute for Collaborative  
Education

Infrastructure | Construction  
Management 1

I'm a rising senior at the Institute for Collaborative Education. I am interested in Urban planning; however, my school lacks related extracurricular activities. Searching for opportunities, I came to intern at the NYC Department of Design and Construction. As a New York, native I've grown up with trains and water filtration systems that set our city above others. At the DDC, I've gotten the chance to work on contracts that help build the newest version of the pedestrian ramps to service our city. Pedestrian ramps help to improve pedestrian safety throughout the city. They help provide easier access for New Yorkers who are disabled, visually impaired, or in wheelchairs. I have also worked to quantify and standardize systems for information related to work extension requests that allowed me to gain insight into the efficacy of different contractors. From this internship, I've gotten the chance to make new friends and learn many skills that will help propel me into a professional career in the built environment.



## Sarah Saad

Brooklyn Technical High School

Public Buildings | Architecture and  
Engineering

I recently graduated from Brooklyn Technical High School as an Architecture major. In September, I will be attending Cooper Union. I am also an artist, a watercolorist, and a doodler who is passionate about STEAM because through STEAM we can interact, investigate, and innovate the world around us. I wish to dive further into architecture because it combines both my creative and logical sides. In my time at DDC I was able to do just that. Under the tutelage of my supervisors Ms. Keene, Ms. Lauter, Mr. Boorstyn, Mr. Fournier-Ferra, and Ms. Solis I gained extensive knowledge of the architectural field. I also learned about various sketching skills, color theory, and space flow -- all of which we utilized in the construction of our own library in the parking lot adjacent to the building. In the future, I aspire to become a licensed architect, and to open my own architectural firm specializing in the creation of economical, energy friendly, green, sustainable designed buildings. My goal is to design buildings that will last for generations and that are beneficial to society.



## Jake Scherer

Millennium Brooklyn High School

Infrastructure | Program  
Administration  
Infrastructure | Design 1

I am a rising senior at Millennium High School in Brooklyn. The DDC summer internship has been an amazing opportunity for me because it offered me exposure to a broad spectrum of careers involved in building NYC, including engineering, architectural design, and urban planning. These are all areas I am very interested in. Since engineering, architecture, and urban planning cover such a broad field, the exposure at DDC will help me focus on the specialties I may want to pursue in college and for my career. I'm interested in urban planning. I find the backbones of cities and how they hold their population and serve important functions for the community to be extremely interesting and important. I was assigned to the Design 1 unit of the infrastructure division, where I have been working on the installation and budgeting of pedestrian ramps across New York City. I have also worked on identifying retail and residential zones on a street to determine what water pipes are necessary for that area to handle the outflow correctly.



## Esther Schonfeld

Yeshiva University High School for  
Girls

Information Technology Services |  
User Support

I am a graduate of Central High School and will be taking a gap year abroad before starting at Stony Brook University's WISE Honors program. I was assigned to the ITS division at DDC, where I've been assisting the Helpdesk unit with various software related tasks, including reimaging and setting up computers. I am interested in STEAM subcategories from engineering to chemistry to computer science and math. Thank you DDC for giving me the opportunity to learn more about the larger ACE fields through trips to construction sites and workshop discussions, while also gaining invaluable IT work experience. During college, I hope to explore these areas in greater depth to build upon the foundation that I've been developing this summer and throughout high school.



## Isabel Vasquez

Saint Mary's High School

Infrastructure | Program  
Administration

In the fall, I will be attending Manhattan College to pursue a career in Civil Engineering. My interest in engineering is partially due to the lack of representation of women and minorities in the STEM fields. I am also passionate about math and science. In the future, I hope to help build up communities in developing countries. This summer, I worked in the Infrastructure Unit at DDC where I learned to read and analyze blueprints and essential pieces of important contracts concerning new additions and renovations across New York City. I also got to visit construction sites in different boroughs. This internship at DDC has opened my eyes to a variety of other careers that fall within the scope of civil engineering, such as mechanical engineering and architecture. It has made me reconsider and evaluate which type of engineering I hope to pursue, and to consider as well which I will enjoy the most. It has been a great opportunity to experience what it means to work for the city, as well as what careers in the STEAM fields entail.



## Arianna Villavicencio

Northside Charter High School

**Human Resources and Staff  
Development | Health and Safety**

In the fall, I will be a senior at Northside Charter High School in Williamsburg, Brooklyn. Northside Charter is a very small school that does not offer a broad variety of classes. During my junior year, I got the chance to take an Advanced Technology and STEM class. We built and launched rockets and raced cars that we created with limited materials. Taking these classes pushed me to seek greater opportunities that would allow me to further explore these fields. I came to the DDC, and got to work with a group of wonderful people, in a variety of positions and professions ranging from stock workers to project managers. At the beginning of the summer I was confused about what path to pursue in college, whether it would be mechanical engineering, business, law, or medicine. Working as an intern at DDC has helped me to narrow my options. I've learned that the agency is so much more than just architects and engineers. From my position in the Human Resources division, I have learned that everyone contributes to making sure the work environment is safe. I have also improved my Excel skills working on data entry ensuring employees have proper footwear for construction site visits. Everyone has the right to know what chemicals are in items they use daily, so I made sure to update the safety data sheets. Lastly, I also went through the entire building conducting an inventory to confirm that all the fire extinguishers had been inspected, the defibrillators were working and that those unable to walk down stairs in an emergency have access to a working evacuation chair.



## Daniel Wolczuk

Baccalaureate School for Global  
Education

**Administration | Capital Budget,  
Payments and Grants**

I am a graduate of the Baccalaureate School for Global Education. In the fall I will be attending the Medical University of Wrocław in Poland. Despite my future being geared towards the medical field, I also have strong interest in other STEM subjects, including mathematics and physics. During my time at DDC, I learned a great deal about design and construction, and how they are used in the creation of the City of New York. I was fortunate to be given the opportunity to travel to job sites with Barry Vanterpool and be mentored by him about everything that goes into these projects. This internship allowed me to learn more about these field. For example, I was not aware about the coordination required to design physical structures in a metropolitan area. I now have greater understanding about what constitutes a well-built city and can identify flaws within a construction site environment. I am more aware and have increased my understanding of the work of the agency in these areas. My experiences this summer will hold a permanent place in my memory.



I am a rising junior at the High School for Math, Science, and Engineering at City College of New York. Participation in this internship program has given me the opportunity to meet many great people. I was the youngest of the interns, but I didn't feel left out. My fellow interns were very welcoming, and they made me laugh and feel happy at work. I am the first in my family to explore architecture as a career. During this summer, I was able to greatly enhance my knowledge of architecture. The experience also helped me consider whether architecture is the right field for me. Architecture brings together a combination of my passions, art, and math. This program exposed me to information about the field that I didn't know. I am very thankful for the opportunity to work among such talented and dedicated people in DDC.

## Karen Wu

High School of Math, Science and Engineering at City College

Public Buildings | Architecture and Engineering



I am a rising senior in Queens Vocational and Technical High School, where I've spent the past three years exploring various areas of construction and engineering, particularly electrical engineering. A flyer I saw posted on a door at school led me to apply to the DDC summer internship, where I was assigned to the Geotech unit within the Safety and Site Support division. The Geotech unit is responsible for testing soils and other hazardous material on construction sites and buildings. I have been responsible for entering data, writing comments on CAD (Computer Aid Design) and inputting building data on GIS (the Geographic Information System). This internship has allowed me to obtain knowledge and learn about aspects of the construction industry that I had no idea about beforehand.

## Haw Wunna Zaw

Queens Vocational and Technical High School

Safety and Site Support | OEGS



I am a rising senior at Midwood High School at Brooklyn College. This summer I had the honor of working in the Infrastructure Unit at DDC. The projects I've contributed to have allowed me to gain insight into the type of work that city agencies such as DDC are involved in daily. I am thankful that my supervisor, Fran Artale, provided me with many opportunities to explore different areas of the city through DDC projects, site visits to Hunter's Point Library in Queens and the Rescue Station in Brooklyn, contract managing and more. Over this summer, my interest in engineering has expanded from civil engineering to different aspects of engineering that involve the construction of buildings, such as structural engineering, and underground infrastructure projects – like the water sewer system. Immersing myself into a professional working environment has also provided me with an understanding of appropriate workplace etiquette, which I believe will be very beneficial in my future career.

## Wilmer Zuna

Midwood High School at Brooklyn  
College

Infrastructure | Executive







# FIELD VISITS



# FIELD VISITS

## HUNTER'S POINT LIBRARY | LONG ISLAND CITY, QUEENS

On Wednesday July 18, the NYC Department of Design and Construction high school and college interns visited the Hunters Point Community Library. Ms. Jillian Ramos led a tour around the neighborhood and highlighted several buildings in construction and city infrastructure of the rapidly growing Long Island City community.

Students walked down to Gantry State park on Centre street where DDC Public Building Hunters Point Community Library is located. Students were able to view the site on all sides and were engaged in a discussion regarding Long Island City's long term urban plan and the anticipation of additional space for transportation, parking and public spaces projected within the next 10 years. The Hunters Point Community Library, designed by Architect Steven Holl, is a \$30 million project and 22,000-square-feet, located at Long Island City. This new

building will provide library services for children, teens, adults, and elders. It will also host local events and community gathering. On the east entrance side, the library face a reading garden border by a low park office pavilion with a bouquet of ginkgo and willow trees. The use of vegetation, filters runoff water to the East River. In regards to Holl's belief, the Hunters Point Community Library is economical and sustainable, in which it meets the LEED (Leadership in Energy and Environmental Design) standards.

The library's vertically-minded design draws inspiration from its skyscraper surroundings. It sits among recently-built waterfront high-rises and faces the Midtown skyline next to Gantry Plaza State Park. With a unique setting, the concrete façade featuring expansive openings that the building's beguiling appearance — with giant puzzle shape windows was inspired for individuals to incorporate their new learning discovery to their own puzzle. Looking through one of the circular viewing portals, a viewer's perception of the surrounding area is accentuated and brought into question. The portals are aimed to orient the viewer, while lenses and reflective materials disorient and abstract the views of the city. The portal, mirror the fundamental purpose of a library, where individuals seek out information, find themselves transported to new realities and come away with new meaning and a different perspective.



Interns analyze and discuss the design of Hunter's Point Library.



STEAM Coordinator Jillian Ramos speaks on the project scope of Hunter's Point Library.



2018 High School Summer Interns visit the Hunter's Point Library.

# FIELD VISITS

## RESCUE 2 | BROOKLYN



High School Interns on the Roof of Rescue 2 Station.

On August 1<sup>st</sup>, 2018, the high school interns, along with college interns, visited the FDNY New Firehouse for Rescue 2, located in 1815 Sterling Place, Brooklyn, NY. John Seerattan, Senior Construction Project Manager, and architect Vincent Dellaquila led a tour around the firehouse and explained the purpose of the station and some features inside the station.

The New York City Department of Design and Construction and the New York City Fire Department seek to construct a new firehouse for FDNY Rescue Company 2, one of the department's elite special operations units. The company purpose is to train and respond to various type of emergencies, from fires and building collapses to water rescues and scuba operations. It allows firefighter to perform rigorous training exercises and disaster simulations that involve a range of skills such as carpentry and metalwork. The design of for Rescue 2 treats the entire building as a "training apparatus" that will enhance the company's ability to both prepare for and carry out their essential role in the community.

The floor design of the facility consists a basement and two stories, all of which is reserved for training. The basement is for weight training and training in confined spaces. The second floor is meant to train firefighters with situations on balconies and on other high ground. The roof contains wall climbing. The facility is also focused to maximize energy efficiently, reduce carbon emissions, conserve water, and contribute to a healthy urban environment by integrating environmentally responsible practices. Hence the facility contains a green roof and a large glass lantern to bring natural sunlight deep into the center of the firehouse.

At the end of the tour, John & Vincent answered questions from the interns related to the firehouse and the process of obtaining a career related to architecture, engineering, and technology. Vincent advised the interns to "never stop learning, whether in college or in the field." He also encouraged them to expose themselves in other fields related to their interest because they will come across different opportunities in their career.



2018 High School Summer Interns visit Rescue 2 construction site, a DDC project in Brooklyn.

# FIELD VISITS

## LEHMAN VR LAB | BRONX

On August 3<sup>rd</sup>, the high school interns visited the Lehman College Virtual Reality Training Academy in the Bronx to get a hands-on experience with Virtual Reality technology and learn about state of the art experiential training. Lehman College has partnered with EON Reality Inc., a world leader in virtual and augmented reality software development and knowledge transfer to create a VR/AR lab used to provide students with training that will position students for career opportunities in the fast-growing fields of Virtual Reality (VR) and Augmented Reality (AR). Interns were able to use the Icube Mobile, a four-wall immersive VR room that allows students to experience and visualize concepts to test different applications. Icube provides a powerful technology platform on which students can learn and test applications in Virtual Reality. Classes offered at the Lehman VR Lab include VR animations, 3D graphics and web design. the goal is to education students on how to develop virtual reality solutions.



High School Intern Allan Raposo tries on the HTC Vive.

Samira Bahrami, Director of CUNY on the Concourse Lehman College and Marcin Kasica, director of global education and training at EON Reality spoke about the power of VR and emphasized that the VR and AR field is growing quickly and will require an infusion of talent to meet the market's demands. Students were able to use different VR devices and play demos in VR with devices like Leap Motion, and ZSpace. The goal of EON Reality is to use existing devices in educational ways through VR and AR by providing immersive experiences that will impact our everyday life.

Mr. Kasica started the class asking the question, "What makes a smartphone smart?" and went on to explain and illustrate the power of smartphones as Virtual and Augmented Reality devices. He also explained how VR could be applied to fields such as construction, architecture, medicine, therapy, sports, entertainment, and all aspects of education. The interns immersed themselves underwater to experience deep sea diving without getting wet, and they were able to go up and down, and upside down at super high speeds on a VR rollercoaster ride. They also viewed diagrams of a neuron and a jet engine and were able to see how VR allows others to see where the user has been through a VR headset and 360 video.

Mr. Kasica introduced an online website Creator AVR where users can upload their 3D digital projects. This site is geared mainly to students and teachers for educational purposes and it can be used to create quizzes to test the user on what he/she has learned about a 3D object. Mr. Kasica also discussed AR Assist an Assistance Augmented Reality program that consists of a headquarter base where information is sent by a user who needs assistance and is located elsewhere. HQ will instruct the user step-by-step in real time, as it can see what the user sees through their headset. The interns learned about the difference between Augmented Reality and Virtual Reality. Augmented Reality uses a software that interacts with your environment to add virtual technological elements. It takes the reality to one step and augments our current state of presence. Pokémon Go is a good example of augmented reality. It is a mix of the real world and virtual world, allowing the individual to experience both. Virtual Reality is totally computer-generated technological recreation aspect that blocks the real-world and takes us to a virtual fantasized dream world. Putting a VR headset allows you to enter into a new world – the highly-used technology in the gaming and entertainment industry to enhance the senses and experiences.



High School Intern Nicole Betances exploring the VR world.



EON Representative Marcin Kasica speaking on the applications of VR.



DDC High School Interns at Lehman VR Lab.



Intern Allan Raposo begins moving objects in the HTC Vive.



Interns experience concept of AR on a business card.



High School Intern Jensen Adre experiences Mixed Reality through a 3D projection of a jet engine.



# WORKSHOPS



# ORIENTATION DAY

## SUPERVISOR MEET AND GREET

NYC Department of Design and Construction (DDC) Acting Commissioner Ana Barrio today met the 26 City high school students who have been selected from almost 600 applicants for paid summer internships at DDC. The students will participate in a summer work program with more than 1,300 DDC professionals that provides a behind the scenes introduction to the fields of architecture, engineering, construction, design, law, business administration and finance. The program began July 5 and will end August 10.

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 more than 2,500 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 Ana Barrio. "Demand for workers skilled in technical fields continues to grow. In the future, some of these students may return to careers at DDC.

"Over the years our interns have left a very positive impression on us," said DDC Community Partnerships & STEAM Initiatives Deputy Commissioner Lee Llambelis. "We have 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. This year our interns will be piloting DDC STEAM's new Virtual Reality curricula and we're very much looking forward to seeing their end product at our closing ceremony next month."

This is the fourth year of DDC's High School Summer Internship program. There are 11 males and 15 female interns, representing each borough and 24 different high schools. Each intern will be 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 (center) pictured with the 2018 Summer High School Interns and the STEAM team.



# WORKSHOPS

## ROAD TO ARCHITECTURE, ENGINEERING, AND CONSTRUCTION



Ashwani Bedi, Deputy Director of Public Buildings, speaking to students about his professional journey.

On July 5, 2018, New York City Department of Design and Construction High School summer interns participated in the Road to Architecture, Engineering, and Construction workshop series. DDC staff members from various built environment professions spoke to DDC interns about their professional and educational experiences and pushed them to be focused, motivated and passionate about their life goals and ambitions.

**Ashwani Bedi, Deputy Director of Public Buildings,** spoke to students about the importance of pursuing higher

education whenever the opportunity arose and regardless of the career path they are pursuing. Mr. Bedi urged students to be inquisitive and constantly motivated. He shared that he initially was interested in a career in the medical field, but ultimately redirected his passion towards civil engineering with a focus on structural design. Before coming to DDC, Ashwani worked in the private sector as an engineer consultant at several different firms. His work experiences made him realize that education and knowledge are two different phases of life, each with its own challenges. Beyond the workplace, Mr. Bedi continuously sought to improve his knowledge and expertise in engineering, and encouraged interns to do the same. He stated, “you decide when to stop, but why stop? Why not go on to become a specialist?”

**Starling Keene, Deputy Director of Architecture,** has been a registered architect for 26 years. Prior to DDC, Ms. Keene worked 30 years as an architect working on a wide variety of residential and institutional projects such as campus scaled multi-building & compound complexes. She spoke about her journey to becoming an architect and emphasized how pursuing a career closely related to one’s passion is the key to success. She also shared that creating tiny jewelry boxes for example, tied her appreciation for aesthetic design to her professional work. From small scale views to large, she stated, “observe the world, especially with the built world, with a new kind of curiosity and interest” and she encouraged interns to expose themselves to many options and opportunities. She emphasized the importance of trying out a few different jobs and make sure the work was interesting to the individual.

Students also heard from **Barry Vanterpool, Director of Capital Budget, Payments, and Grants.** Mr. Vanterpool noted he had spent most of his career at DDC working in engineering and financial management and had dealt with many challenging obstacles within the construction industry. He further noted that it was important to carefully assess and think about critical situations and the importance of understanding that gaining knowledge is different from understanding it. “When doing a task, stop, and think to determine if the decision is the right one,” he said, and stressed the need to pursue and value their own unique interests and talents as an individual. Mr. Vanterpool stated, “Always aspire to be more and get the most out of life.” He also emphasized the importance of a skillful application of knowledge and understanding.

# WORKSHOPS

## COLLEGE READINESS

On Monday July 16, the NYC Department of Design and Construction High School Interns participated in College Readiness workshops. Informational workshops are a fundamental component of the High School Summer Internship Program. The College Application & Financial Aid 101 workshop focused on the various types of colleges, as well as the necessary tools for navigating the college application process, and opportunities available to students when they are in college.

DDC Summer College Aide Brenna Hemmings and DYCD College Interns, provided essential information regarding the 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 advice they had received from counselors and other resources. The workshop was a primer on how to navigate the multifaceted college and financial aid application process.

The College Panel provided the High School interns with an opportunity to hear from college interns about their education and



DDC Summer College Intern Brenna Hemmings speaks about her college experiences.

professional experiences. They heard from DDC Summer College Intern Brenna Hemmings, Department of Youth and Community Development (DYCD) Summer College Interns Carmen Huang, Jacky Lo, Kimberly Muniz, and Saydia Hossan. Hemmings is a graduate urban planning major at Hunter College. She spoke about her transition from high school to college. Brenna is a graduate of SUNY New Paltz, where she studied History and Sociology. She also participated in the study abroad program and spent a semester in Prague. Brenna spoke about the importance of learning “something new” 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. Hemmings encouraged students to make a point of meeting other people and networking because those individuals could provide them with contacts, resources, and opportunities in the future.

# WORKSHOPS

## INTERVIEW SKILLS & RESUME WRITING

On Friday, July 6th, 2018, High School Summer Interns participated in a Professional Networking and Interview Skills workshop. Featured speakers for the Resume Workshop were Thomas Leung DDC Infrastructure Director of Design 1 and Engineer-In-Charge, Cristian Schwartz.

DDC STEAM Team Program Coordinators first led an interactive professional networking exercise, where students observe mock conversations and were able to alternate and share out their suggestions for best practices in the professional work setting.

The students were divided into groups where they participated in mock interviews led by DDC College Interns Jacky Lo, Carmen Huang, Kimberly Muniz, and Saydia Hossan. At the end of the exercise the interns shared their observations regarding different qualities they perceived were essential for a successful interview, such as confidence, eye contact, and a firm hand shake.

High School interns then participated in a resume and cover letter writing workshop led by two Directors of the Infrastructure Division – DDC Director of Design 1, Thomas Leung and Engineer-In-Charge, Cristian Schwartz. Mr. Leung took time to review each resume from each High School intern, mistakes were noted, and provided students with valuable feedback on how to make their resumes professional and stand out as a potential hire. Mr. Leung emphasized that a resume should follow a general format consisting of a heading, objective, summary of qualifications, education, and experience. He noted the importance of using strong action verbs, and listing accomplishments rather than just responsibilities as elements crucial to writing a resume. “A good resume should strike a balance between design and content.” Mr. Leung stressed putting experiences and skills on a resume that cater to the position, as “relevancy is the key”. Mr. Leung also suggested each person use their personalized style of writing, because ultimately “the resume represents you!”

Additionally, Mr. Leung and Mr. Schwartz also discussed the purpose of a cover letter, and gave the interns tips on what should be included. The cover letter they noted should present the value that the individual can bring to the role. Mr. Leung emphasized, the need “to show your skills by giving examples, not just listing them.” The interns concluded the workshop with a fun “How to tie a tie” relay race in which groups of students practiced their tie tying skills. Ties were donated from various DDC Directors and professionals for the exercises.



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

# WORKSHOPS

# INTRODUCTION TO VIRTUAL REALITY

**LUCY WONG**

PROGRAM DIRECTOR  
PUBLIC BUILDINGS



*"I became interested in VR 3 years ago and have since continued my search to include DDC as a part of the technology's advancement in the AEC industry." -Lucy Wong*

The 2018 High School Summer Interns had the opportunity to participate in a pilot Virtual Reality (VR) program during their six weeks here at DDC. The twenty-six high school interns worked on the VR program as part of their workshop hours on Mondays. The students spent a total of twenty-four hours dedicated to VR instruction and studio hours to collaboratively

create a culminating VR video project focusing on community development and NYPD Police Precincts. The students focused on two of DDC's new NYPD Police Precinct projects: the 40th Precinct in the South Bronx and the 116th Precinct in Southeast Queens. These precincts are a part of newly piloted designs which will now include community rooms that are attractive and easily accessible by the public. As part of their project, interns provided input on their perspectives about what community means to them and how a new community room in their neighborhood best serves the community. For many of the students this was their first experience in the virtual reality realm. Instruction during their Monday morning workshops were led by Program Director for Public Buildings, Ms. Lucy Wong. As part of 2-hour learning sessions, students participated in web conferences with various speakers and leaders in the Virtual Reality Industry. This year's insightful program speakers included: 2018 Coro Fellow, Zach Litif, Facebook Software Engineer Loren Sherman, New York Times Producer Maureen Towey and MIT Professors for Comparative Studies William Uricchio and Sandra Rodriguez.

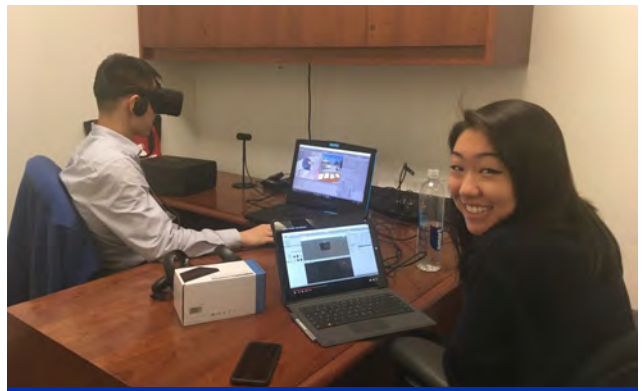
Each speaker passionately shared their professional journeys and spoke about their road to a successful career in computer science and the virtual reality industry. Guest Speaker and MIT graduate Loren Sherman, a Software Engineer for Facebook explained how many of his skills were self-taught utilizing "how to" video-editing programs, such as Unity and Blender.



Program Director Lucy Wong addresses topics in VR from VR history to current careers.

## ON INDUSTRY...

*"Architects and engineers design impactful buildings fitting within its neighborhood context. Our future lies in technology to bring a vision of vivid buildings to life for clients to re-create captivating experiences. The AEC industry can advance its client engagement, building efficiency, and production ability using new platforms of immersive technology throughout the design processes. DDC as an industry leader can help drive this advancement." - Lucy Wong*



LFL Interns working with Oculus Rift.

He recommended the interns simply “Dive in, and practice.” Guest Speaker and Senior Producer for The New York Times Daily 360 Video, Maureen Towey a graduate from Northwestern University stated “Virtual Reality was something I had not expected to take on”. She emphasized the importance of being flexible and open minded in the world of work. During the afternoons, Interns participated in a 4-hour tech studio class with Senior Project Manager Hossain Taimur. Interns learned how to use 360 video imaging equipment and how to edit their footage in post-production using Power Director software. Interns examined and learn to use the functions of Gear 360, Oculus Rift, and Google expedition. Additionally, through our partnership with CUNY Lehman College, the students were able to spend a day at CUNY Lehman College Virtual Reality Lab for a full day of immersed activities.

Simultaneously, DYCD Ladders for Leaders (LFL) College Interns, Jacky Lo and Carmen Huang under the guidance of CUNY Lehman College Virtual Reality graduate student, Vincent Navarro were tasked with utilizing their computer science background to create an enhanced interactive virtual reality video. The interns could create a visually immersed experience supporting the community engagement theme. The high school and LFL college interns both used the same content given by the instructors. They collaborated in task groups to create two culminating final projects complete with 360 visuals as well as voice recordings. LFL college interns utilized their coding knowledge to enhance the final product. The high school interns and the LFL college interns showcased their 360 video and VR projects for the first time in front of instructors, peers, and DDC industry leaders.

Virtual reality tools expanded into the Architecture, Engineering, and Construction (AEC) industry in the mid-2010s. While attending Massachusetts Institute of Technology, Ms. Lucy visualized a potential to enhance education within the STEAM Initiatives program. Together with DDC Deputy Commissioner Lee Llambelis the idea came to fruition in 2017 when Coro Fellowship intern Zach Litif created a VR 360 video prototype with the built environment featuring DDC projects in the Long Island City neighborhood. This 360 video became the working model and the basis of the VR curriculum for the HS students. Ms. Lucy along with the STEAM team, created the framework for a comprehensive technical curriculum. The model encapsulated STEAM’s initiative to promote cutting edge technology and 21st century skills for DDC High School Interns.



**HOSSAIN TAIMUR**

**SR. PROJECT MANAGER  
PUBLIC BUILDINGS**



**Interns working in Power Director.**



**Facebook Software Engineer Loren Sherman in web conference with interns.**

# WORKSHOPS

## RAINY DAY ENGINEERING

On Wednesday, July 25th 2018, the NYC Department of Design and Construction High School interns participated in full day of hands on engineering challenges. Interns worked in various groups to complete time sensitive engineering activities that required a team effort as well as concentrated on communication and other team building factors. The interns also viewed a screening of “Dream BIG: Engineering Is Everywhere” Interns were able to discuss inspirations and their own pathways to obtaining professional Engineering and Architectural careers in todays world. DDC Deputy Commissioner Lee Llambelis was on hand to give insight on her own professional journey and discuss some pitfalls students may encounter along the way when choosing a university or college.



High School Interns discussing their plans.



High School Interns secure their message.



High School Interns “jetting” their message across the room.



High School Interns working together to build a straw tower.



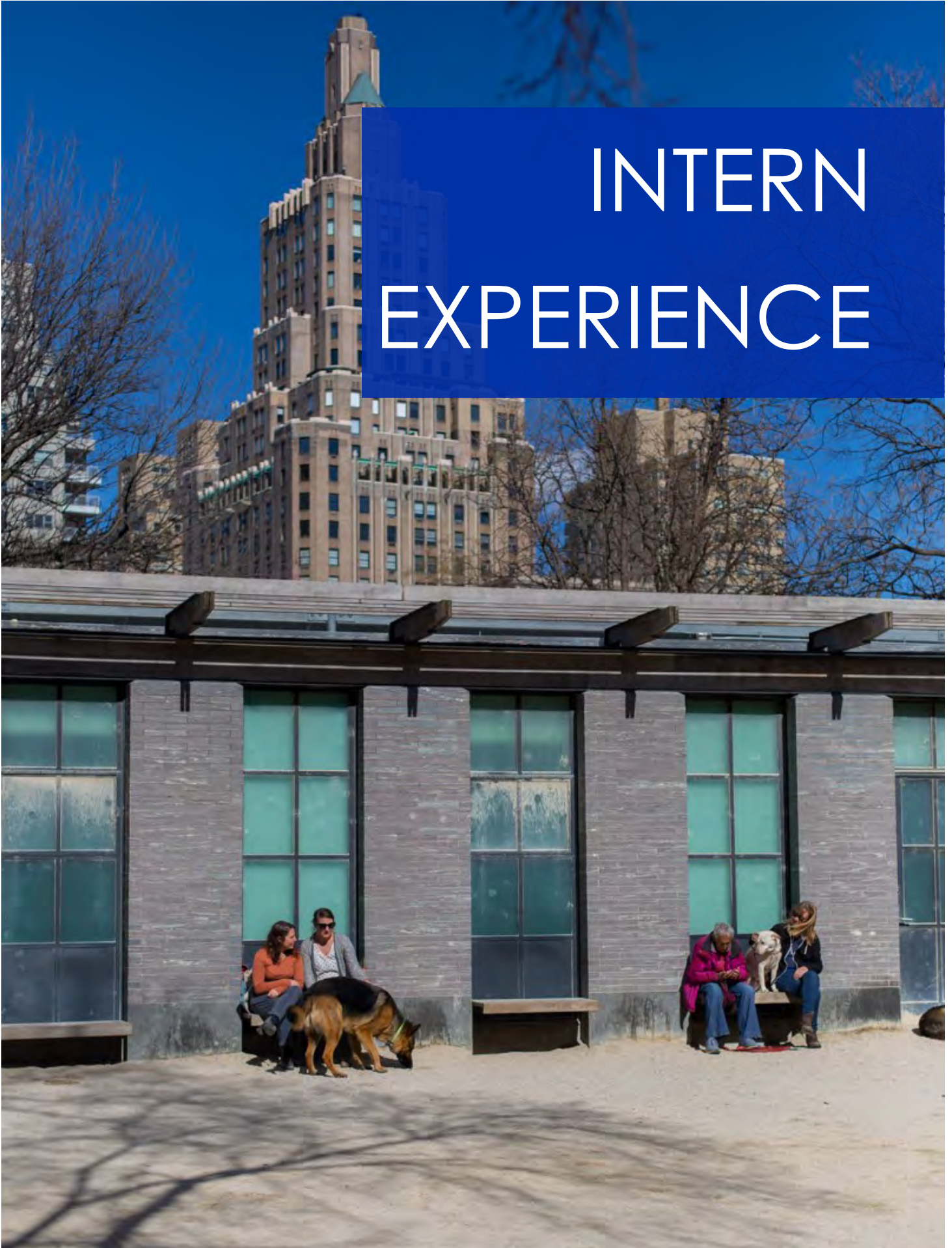
High School Interns writing their balloon message.







# INTERN EXPERIENCE





Interns practicing interviewing skills.



Interns preparing a timeline for VR project.



DDC summer interns after hours.



DDC summer interns walking to Hunter's Point Library.



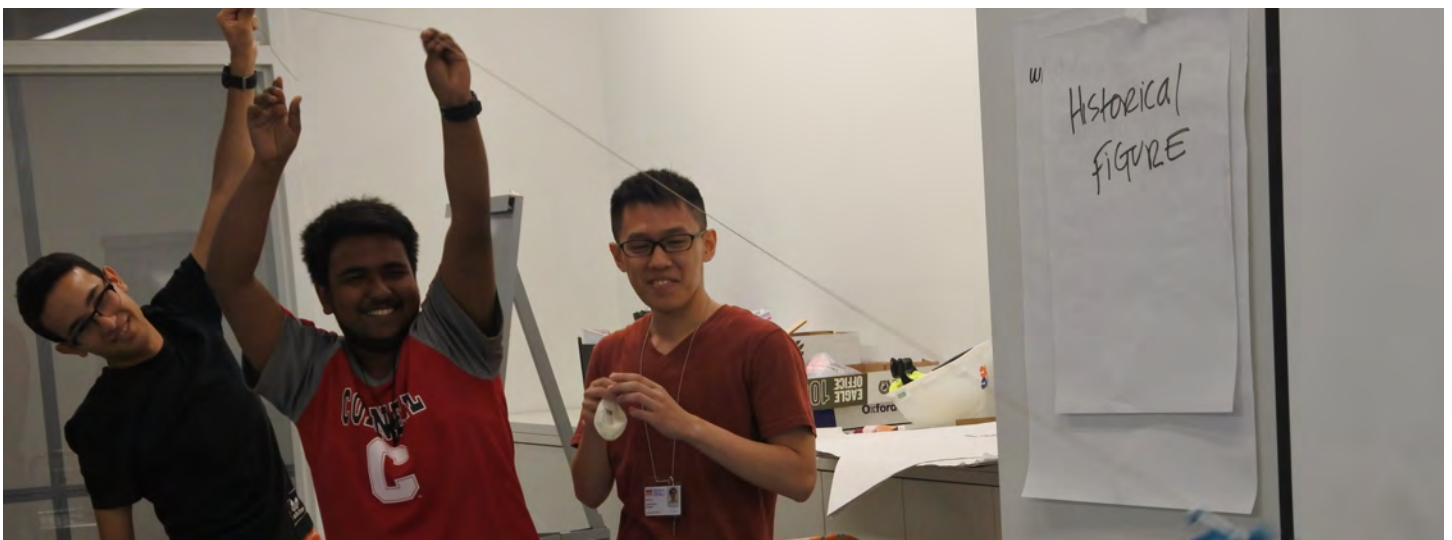
Interns participate in a team building exercise.



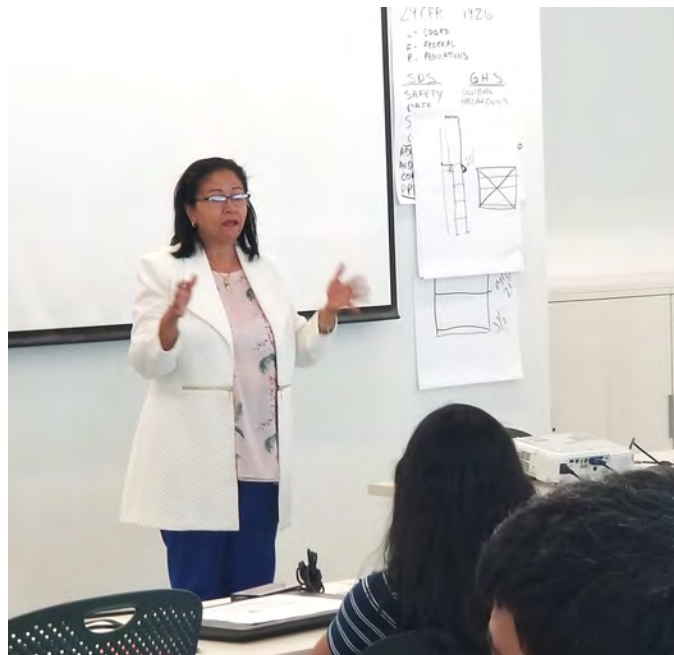
Interns practicing self introductions.



Interns preparing notes on their balloon rocket.



Interns Jake, Mohammed, and Jacky attempt to use gravity to launch their rocket to the other side.



Deputy Commissioner Lillian Llambelis speaking about careers and college.



DDC summer interns start the day with newspaper crossword puzzles.



Deputy Commissioner Lillian Llambelis addresses interns on Orientation Day.



High School Interns testing their balloon rocket.



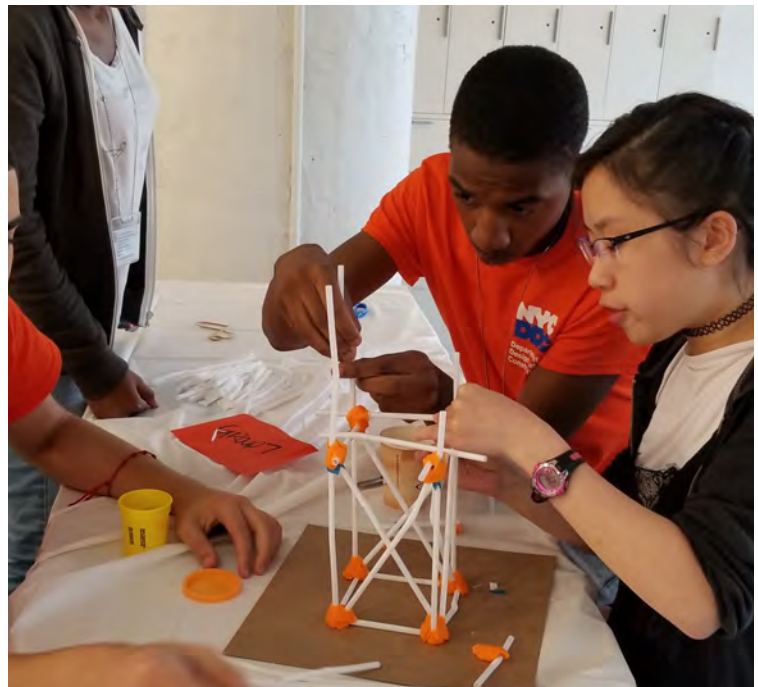
Interns Karen, Sarah, and Patrick waiting for the reception of their rocket.



Interns Haw and Jensen prepare their rocket.



High School interns returning from supervisor site visits.



High School interns building their straw tower.



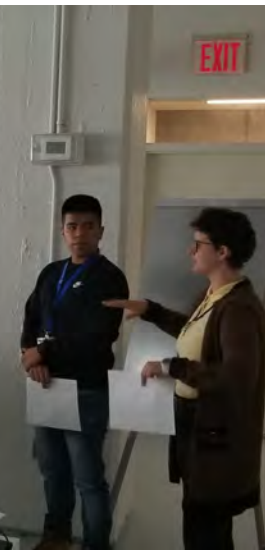
Intern Patrick Biesty beginning the Tie Rally.



High School Interns visit Hunter's Point Library.



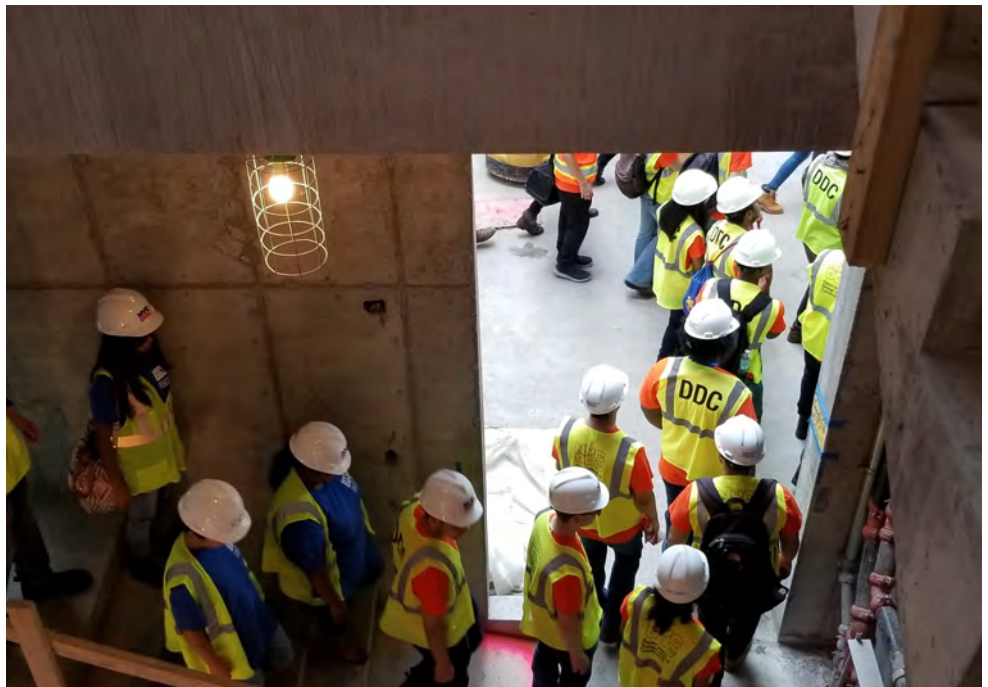
Interns Wilmur and Ana Maria pitching timeline proposal for VR project.



High School interns participating in the Tie Rally.



Lucy Wong speaking on the importance and applications of VR.



DDC Interns tour Rescue 2 Station in Brooklyn.





# SUPERVISOR APPRECIATION

### **Jensen Andre**

My DDC internship has been very useful and productive, especially because I was assigned to the Information Technological Department (ITS). In ITS, I worked under Shabash, Devendra, Frank, Mitch, and Wilbur. In both the programming and networking units, my co-workers and I were pushed to excel at every task we were assigned. The amount of times we had to rethink our approach to certain assignments challenged us to find solutions to troubleshoot the various obstacles we encountered. There was an instance where neither our supervisors or ourselves had an idea as to how to approach the hardware reset of an older model computer. My co-workers and I were able to do some thorough research to resolve this issue. It took us multiple attempts to formulate this plan, but it was well worth the effort. Thanks to our supervisors not only were we able to learn from our mistakes but we were able to use these lessons to achieve personal growth. The encouragement provided by my supervisors made my time at the DDC well spent. Thank you all!

### **Maureen Awad**

I'd like to thank my supervisor, Lorena Chacon, and Jonah Fields, her college intern, for not only accompanying me on this learning journey, but for leading it. I'm thankful for having you both as mentors and am glad to have been one of the first high school interns you've ever mentored! Thank you for exposing me to the different aspects and subfields of engineering and architecture. You have provided me with a great deal of practical knowledge that I have no doubt will help me in the future. The projects that we've covered in a short period have been informative. I hope you continue mentoring high school interns and impact their future careers as you have impacted mine. Thanks again!

### **Nicole Betances**

I would like to thank Carol for her warm welcome to the office. Thank you to Quilian for getting me started in the office before Jim was able to get here and for setting up the weekly meetings with coworkers so we can get a chance to see what everyone does and meet them on a more personal level. Thank you Oral for introducing me to professionals in the office and treating me as an equal. Thank you to all these amazing people for making me feel welcomed and part of the team. It was a pleasure working with all of you! Thank you.

### **Patrick Biesty**

Omar Khan and Donna Lynn are phenomenal workers in the Information Technology Services Department. They have not only been there for me when I first started working here last year, but continued to help me grow my second year back. Omar has taught me more about computers than I would ever hope to learn, and Donna always made sure I had work to do and was comfortable in the work environment. Going to Stevens Institute of Technology, I think this job - and Donna's recommendation letter - is what solidified my acceptance and scholarship there. The two of them have been the nicest, most influential, and greatest people I ever worked with. The end of this internship is something I'm going to be upset about, but I know I will go into college and a career well prepared for many computer related problems because of these two and the rest of ITS. I loved DDC, ITS, and am excited for my future because of them. I would also like to say thank everyone in the STEAM team who made all of this possible, and the great trips we went on. No experience is ever going to top my time at DDC.



### **Erica Chen**

I would like to thank my supervisor Dalela Harrison, EEO Officer of the Equal Employment Opportunity Division. Dalela works a lot with people, so communication is an important asset. I learned from her that the slightest remark with good intension may cause another person a negative impact. She is always cautious of what she says and how thought out her actions need to be. Her awareness and mindset has influenced me to be more awake to what my actions and words can cause. I would also like to thank Director Dawn Fitzpatrick from the Planning and Reporting Section in the Administration Division. She helped familiarize me with the field of finance. For the short time I worked with Dawn and her division, they were very welcoming and kept me busy learning new things. Among other things, I learned about the functions of Microsoft Excel and the importance of being detail orientated when imputing data. Excel is a key asset in working with not only finance but amongst other occupations as well, and I am grateful that I could develop these skills here this summer.

### **Lorraine Colbert**

While interning at the Department of Design and Construction I have had the great opportunity to work with someone from practically every sub-division within public buildings, but I must give a special acknowledgement to Kate Solis, Alanna Soszynski-Lauter, Jaime Fournier-Ferra, Starling Keene and Eric Boorstyn who welcomed us on our first day and have answered many, many questions! Thank you to Starling for proving that careers are not set in stone and that there is always room for exploration. Thank you to Eric for always keeping a friendly face and an open door. Thank you, Kate, for serving as my main supervisor and organizing a private schedule with opportunities every day to meet new people within DDC. Finally, I would like to give special thanks to Jaime and Alanna. Jaime, you have delved into my favorite topic of the arts and given me new insight to the way I view things every day – not just as an architect, but as an artist. I will take away one great piece of advice from you and continue to apply to every design moving forward in my career: create a space and then disrupt it. Alanna, you managed to create a project for my intern group and then squeezed it into only 6 weeks, when in school a professor might drag it out for a full semester. You helped us through every step of the design process, and encouraged us to be curious, all while you also handled your own work of day long site visits and meetings. I appreciate all your efforts!

### **Shamel Crosland**

I would like to thank Karen Butler for teaching me how to use the app “Track-it”. Thank you for helping experience how it feels to work as a technician. Thank you also to Sabrina Lightburn for teaching me how to use the many different tools on Microsoft Excel in order to let me get the hang of data entry.

### **Quansae Herring**

I would like to thank my supervisor Douglas Tiburcio for being the best supervisor that he could be. He always looked out for my best interests while making sure I had a rich learning experience here at DDC. He is a very charismatic gentleman, which made working with him on a day-to-day basis a breeze. He made me feel comfortable in the work environment where I initially felt out of place. He didn’t only teach me professional lessons at DDC, he taught me life skills that I will take with me beyond this internship and will always remember. Once again, thank you Douglas.

### **Fatin Iftekhar**

During my time at the DDC, I had the pleasure of being assigned to the ITS department. I am so happy that this happened because I met people who coached me on important things, the job itself and life in general. These people are Devendra, Frank, Mitch, and Wilbert. Thank you Devendra for introducing me to networking and computer hardware. He gave me tasks that were very challenging and taught me things that I have always wanted to know such as, how to assemble computers and create different types of setups, as well as booting operating systems. Frank also gave me projects and research to do, along with computers to fix and test. On some days Frank took me to the server and multiple switch rooms, where he taught me how the wires connect computers to each other. Mitch and Wilbert deserve my thanks as well, because they were always there when I needed help with a project. Both were extremely knowledgeable and helpful. These four made my job in the ITS department fun and interactive and that resulted in a great summer for me.

### **Mohammed Islam**

Hello DDC STEAM! First, let me say that this has been one of the greatest internships I have ever participated in. I would like to thank everyone for making me feel welcome in such an amazing place. Specifically, I want to thank my supervisor Nitin Patel for being such a great teacher and mentor to me since day one. You taught me so much about the infrastructure department, the work behind the scenes, and opened my eyes to exactly what being a DDC engineer/designer is like. Thank you for all the lessons and guidance you provided. I would also like to thank Jorge Tua for being a great mentor and a guiding voice in the department. Thank you for always keeping me prepped and ready for new work, exposing me to the design and building process, and giving me that awesome drone design project. You are a great person and an irreplaceable friend. Finally, I would like to thank the STEAM team for always being there to talk to, keeping all of us in check, and giving me the chance to do something meaningful in one of the best summers I will always remember. This has been one of my best experiences in my high school career. Once again, THANK YOU ALL FOR EVERYTHING!

### **India Jones**

During my DDC time, I've gotten the chance to work with the FLEET Management team. I've enjoyed the experience and would like to thank my supervisor and mentor Florence Green Zelaya, for the opportunity. I would also like to thank her for all the great advice she has given me on the work place and on choosing a career. I really enjoyed working with FLEET. I also now understand how traffic violations & tickets work. My experience working with Florence was great and I am grateful for the opportunity.

### **Olivia McLernon**

Lorena Chacon, you are a legend! You allowed me to explore so many topics I had never thought of. Mocking up floor plans and acting as the leading engineer in charge was a fantastic experience. My perspective on architecture and engineering definitely changed when you tasked me with putting air conditioning inside the Snug Harbor project. Thank you for everything! Working with you is unforgettable.

Jonah, you are a savior to us all. Thank you for teaching us AutoCAD and Rhino, they are really fun programs. Also the inside info on RPI will definitely help with college choices. Thank you for all your instruction.

### **Wengelyn Muñoz**

During my time at DDC, I had the opportunity to work with Rose Marquez, Lorena Chacon, and her college intern, Jonah Fields. I was able to learn something different from each of you. Rose taught me the difficulties of each stage of a project and I did hands on work comparing cost estimates with the contractor's bid and reading drawings. Lorena gave me exposure based on my specific interest in architecture for which I am truly grateful. I played the role of the professional architect as she presented me with problems and questions related to our project. She taught me about the work environment and how closely architects work with the engineers and project managers. Jonah bridged the gap between me, a high school intern, and the professionals by giving me insight on his college experience majoring in architecture and excellent advice on how to navigate college. He also introduced me to the basics of BIM software. I would like to thank all of you for giving me this amazing experience. It has strengthened my interest in architecture. Special thanks to Lorena and Jonah for making this summer so enjoyable with all the daily laughs and warm smiles.

### **Ana Maria Oliynyk**

I was lucky to have been assigned Jorge Tua as my supervisor in the infrastructure unit. His deep and evident appreciation of civil engineering has led several of his former interns to pursue careers in civil engineering themselves. He is a wonderful role model. Mr. Tua opened my eyes to complexity of the urban world around me. He also gave me the opportunity to learn of all key design standards relating to sidewalks, curbs, green infrastructure, and so much more. The exposure to civil engineering that he allowed me to experience spanned a multitude of different concentrations. In the end, he helped me realize that engineering, and the opportunity to engineer creative mitigation methods, was exactly what had been missing from my career plans and my desire to create a greener future. It can be said that Jorge Tua gave me the chance to understand that I had been aiming to pursue environmental engineering all along, and for that I am truly grateful.

### **Allan Raposo**

I would like to thank my supervisors Cherian Poopalil, Nicole Harvey and Rosa Perez for giving me a wonderful experience this summer. Throughout of the course of this internship, with the help of you the three of you, I was able to gain some hard skills in Autocad, ArcGis, and Software installation. The skills I have learn will be very useful in the future, so thank you for that. I will also like to acknowledge you guys for listening to my ideas and for being a valuable resource to me; one that I can rely on if I have any doubts or questions. I'm glad to have had you as my supervisors. I will miss you all!

Sincerely, Allan Raposo

### **Michael Rosenbaum**

I am grateful to have worked for Christopher Esposito-Bernard and Thomas Leung both wonderful role models. To Christopher, thank you for introducing me to the world of the built environment and showing me how this place runs, and also pointing out the skills I will need so that I can effectively do this work, and also for emphasizing the importance of persistence. To Thomas Leung, thank you for giving me hands on experience working in the field I'm interested in and for making me feel like I'm part of the group that you lead, and to the larger group, thank you for making me feel at home.

### **Sarah Saad**

I would like to thank my supervisors Ms. Solis, Mr. Boorstyn, Ms. Lauter, Ms. Keene and Mr. Fournier-Ferra for making my time here at DDC enjoyable and rich with knowledge. Mr. Boorstyn and Ms. Solis coordinated our time in order to expose us to as many aspects of the Architecture and Engineering Department as possible. Ms. Keene taught us how to view the world from an architectural perspective and by doing so helped us find the beauty in all forms. Ms. Lauter guided us in designing our own library and walked us through the design process, and Mr. Fournier-Ferra taught us the beauty in sketching and how it can convey a message. He also introduced us to the world of color theory. It has truly been an incredible experience here at DDC and it has made me even more eager to pursue architecture in the future.

### **Jake Scherer**

During my six weeks at the New York City Department of Design and Construction, I had the incredible opportunity to work as an intern for Landry Philemy and Thomas Leung. These two supervisors gave me the opportunity to understand what it is like to work at DDC and how DDC builds New York City. Landry did a fantastic job introducing me to almost everybody around the office and showing me every phase of each project, from the initial bids to when it is actually completed. Thank you also to Thomas for giving me the opportunity to work on massive and urgent projects and present the work that I did to the associate commissioner, and also for pairing me up with Mariola Siuta and Roberto Lumelino so that I could get a broader perspective of what is like in his unit rather than just the work that he does. I would lastly like to thank Fran Artale for the opportunities she presented so that I was able to get the best experience at DDC like sending me to construction sites and pairing me with a supervisor that she thought would be the best fit for me. My time at DDC opened my eyes to new career paths and areas of study during college, so thank you all for a delightful and educational summer. I hope that we can stay in contact.

### **Esther Schonfeld**

During my time at DDC I worked with several supervisors and I am grateful to all of them for teaching me so much about professional IT work. Galo Lazo always had patience for helping me troubleshoot various issues and I learned extensively working with him on setting up Surface computers. Donna Lynn always made me feel welcome when she checked in on me and made sure I was always busy. I also really enjoyed when Desmond Garcia took me to different units and showed me how to set up computers and TVs. Overall, I'm so grateful I was able to work with an amazing group of people and learn so much throughout the course of this summer.

### **Isabel Vasquez**

Thank you so much for the guidance you have given me and the other interns this summer. Fran Artale, your personal experiences, stories, and advice were very beneficial for me to hear and have helped me in ways you can't imagine. You've been a great role model for me to look up to here at DDC, especially as a woman in a leadership position. Thomas Leung, thank you for giving me the opportunity to learn more about civil engineering. The experiences I've gained through this internship will be useful as I start my college career this fall. Roberto Lumelino, thank you for being patient and for explaining the many different tasks assigned. I very much appreciate the time you all dedicated to making our summer internship experience a valuable one.

Yours Truly,

Isabel Vasquez

### **Arianna Villavicencio**

This summer I got to work alongside Jenny Lai, the Director of Health and Safety in the Human Resources Division. I am very grateful that I was her only intern because we had a lot of one on one time. She made this new work environment easier to adjust to by being so welcoming. Jenny took me outside of my comfort zone by doing a walkthrough of the whole building which is something I probably wouldn't have been able to do alone. Whenever we would walk throughout the building to ensure it was safe, she would always introduce me to other DDC employees. Jenny has a very positive attitude and she doesn't shy away from displaying it to everyone in the office. She has taught me that there are so many components that go into making sure the DDC is safe. Thank you Jenny for your kindness and generosity!

### **Daniel Wolczuk**

Thank you, Barry Vanterpool, for everything. You made my experience as an intern thrilling and you helped me find enjoyment with the work I was tasked with completing. With constant field office & site visits, being taught about the logistics of construction, and with the many personal talks we had about our lives and exercising, I was truly able to connect with you. Coming into this program, I did not anticipate that I would develop a strong relationship with somebody within the professional environment. Yet this is what happened, and I am very grateful for the time we spent together.

I would also like to acknowledge the other amazing people I met and worked with at DDC. I had the pleasure of working with Karin Louie; thank you for the time we spent on site visits and for teaching me about your responsibilities. You and Barry make a great team. I loved the fun yet professional dynamic of our relationship and I wish you both well in the future. Finally, I would like to thank Stephanie Lopez who allowed me to assist with her duties during her last days at DDC.

### **Karen Wu**

During the two months I was working at DDC, many people assisted me and helped me grow as an individual. I would like to give thanks to Ms. Alanna Soszynski-Lauter, Mr. Jamie Fournier-Ferra, Ms. Kate Solis, Ms. Starling Keene, and Mr. Eric Boorstyn. Thanks to Ms. Alanna's assistance, I learned about the many steps behind the creation of buildings. Thanks to Mr. Jaime's teachings, I am more free with my sketches and can start developing my own style. He never fails to make my colleagues, Sarah, Lorraine, and I laugh with his jokes. Thanks to Ms. Kate and Mr. Eric for organizing my time here at DDC to make it productive and fun every day. Thanks to Ms. Starling for teaching me to be more aware of my surroundings and be inspired by them. I would like to also give my thanks to the STEAM team. They assisted me tremendously during my internship and made it very meaningful. I would like to give a special thanks to Ms. Tatiana for taking care of me during my trip to the Rescue Station. Finally, I would like to thank the STEAM team for selecting me for this internship. This internship has really impacted my life positively, from making friends to learn more about architecture. Thank you again!

### **Haw Wunna Zaw**

During my time at the Department of Design and Construction, I had the opportunity to work under Richard Meserole and many other amazing people from the Site and Safety division who welcomed me and made my time at DDC enjoyable. I also want to thank team from the Site and Safety division who took me on trips and taught me about their work. During my first day of work, Richard took his time to explain and show me around the division. He also helped me understand how DDC works and how each division is important to complete a project. I'm very thankful for the experience I gained this summer from the DDC internship.

### **Wilmur Zuna**

I am thankful to Cristopher Esposito-Bernard for working with me through the first week of my internship. His familiarity and kindness allowed me to develop professionally in the work place. In addition, I became well-rounded with the types of projects that DDC undertook. I am thankful to my supervisor, Fran Artale, for providing numerous opportunities to explore the different units and construction sites that DDC manages. Being an intern at DDC opened an inside perspective to the engineering aspect of construction. From the first day that I was formally introduced to Fran, I realized I would look forward to working with her. I am also thankful to have worked with the Director of Design, Thomas Leung. His advice and help guided me throughout my time at DDC. Having been tasked with different projects, I was able to learn many things – among them reading site maps, blueprints, memorandums, etc.



# SELFIES WITH SUPERVISORS





Wilmur Zuna, Isabel Vasquez, Jake Scherer, Fran Artale & Michael Rosenbaum



Dalela Harrison & Erica Chen



Wengelyn Muñoz, Maureen Awad, Lorena Chacon, Olivia McLernon & Jonah Fields



Sabrina Lightburn & Shamel Crosland



Jaime Fourier, Lorraine Colbert, Kate Solis, Karen Wu & Sterling Keene



Erica Chen & Dawn Fitzpatrick





Jorge Tua & Ana Maria Oliynyk



Wilbur Percy, Fatin Iftekhar, Jensen Andre, Devendra Rawal & Frank Durham



Daniel Wolczuk & Barry Vanterpool



Mohammed Islam & Nitin Patel



Nicole Harvey, Allan Raposo & Cherian Pooppallil



# ACKNOWLEDGEMENTS

*Thank you to the following NYC Department of Design and Construction staff members for their collaboration and support in making the 2018 High School Summer Internship Program a success.*

## **For providing leadership and support for the High School Summer Internship Program:**

Commissioner Lorraine Grillo  
First Deputy Commissioner Jamie Torres-Springer  
Deputy Commissioner Community Partnership & STEAM Initiatives Lillian Llambelis, Esq.  
Chief Diversity & Industry Relations Officer Magalie Austin, Esq.  
Executive Director Intergovernmental & Community Affairs Jeffrey Margolies, Esq.  
Deputy Commissioner/ General Counsel Law David Varoli, Esq.  
Equal Employment Opportunity Officer Dalela Harrison  
Executive Director Public Information Ian Michaels  
Deputy Commissioner Infrastructure Eric Macfarlane, P.E.  
Deputy Commissioner Public Buildings Thomas Foley, P.E., CCM  
Chief Architect Margaret Castillo, AIA  
Chief Administrative Officer Administration Justin Walter  
Human Resources Department  
Operations Department  
Creative Services Department

## **Our DDC High School Intern Supervisors:**

Barry Vanterpool, Cherian Pooppallil, Donna Lynn, Douglas Tiburcio, Florence Zayala Green, Frances Artale, Janice McDonald, Janusz Wojciechowski, Jenny Lai, Jorge Tua, Kate Solis, Landry Philemy, Nitin Patel, Quilian Riano, Richard Meserole, Sabrina Lightburn, Thomas Leung, Wilbur Percy, Nicole Harvey, Dawn Fitzpatrick, Miosotis Jorge, Lorena Chacon, Subhash Mathew, Alanna Soszynski-Lauter, Eric Boorstyn, Jaime Fournier-Ferra, Starling Keene, James Russell, Carol Clark, Oral Selkridge, Kristine Malek, Andreas Papaneocleous, James Ruchalsk, Yves Belancourt, Justin Kennedy, Roberto Lumelino, Christopher Esposito-Bernard, Frank Durham.

## **For leading DDC construction site visits and VR Lab Tour:**

Shakeel Ahmed; John Seerattan and Vincent Dellaquila of LiRo Group; Marcin Kasica of EON Reality.

## **For leading educational workshops and sharing their professional and educational experiences with the interns:**

Ashwani Bedi, Barry Vanterpool, Brenna Hemmings, Cristian Schwartz, Lucy Wong, Thomas Leung, Zach Litif.

## **For successfully coordinating the High School Summer Internship Program:**

STEAM Initiatives Team: Deputy Director Sandrine Fermino, Program Coordinator Jillian Ramos, Program Coordinator Tatiana Vargas, Program Coordinator Yaw Teh

DYCD Summer College Interns : Saydia Hossian, Kimberly Muniz, Jacky Lo, and Carmen Huang

## **Virtual Reality Coach :**

Vincent Navarro

*Thank you to the following agencies for their partnership and support in making the 2018 High School Summer Internship Program a success!*

## **Office of the New York City Mayor**

Mayor Bill de Blasio

## **Department of Youth and Community Development:**

Commissioner Bill Chong, Senior Director Julia Breitman, and Workforce Analyst Nurus Salam

## **Administration for Children Services:**

Deputy Commissioner Felipe Franco, Associate Commissioner Charles Barrios, Executive Director Close to Home/ Youth and Family Justice Leslie Britt , and Coordinator Tamarisk Duporte



**Department of  
Design and  
Construction**



**Bill de Blasio  
Mayor**