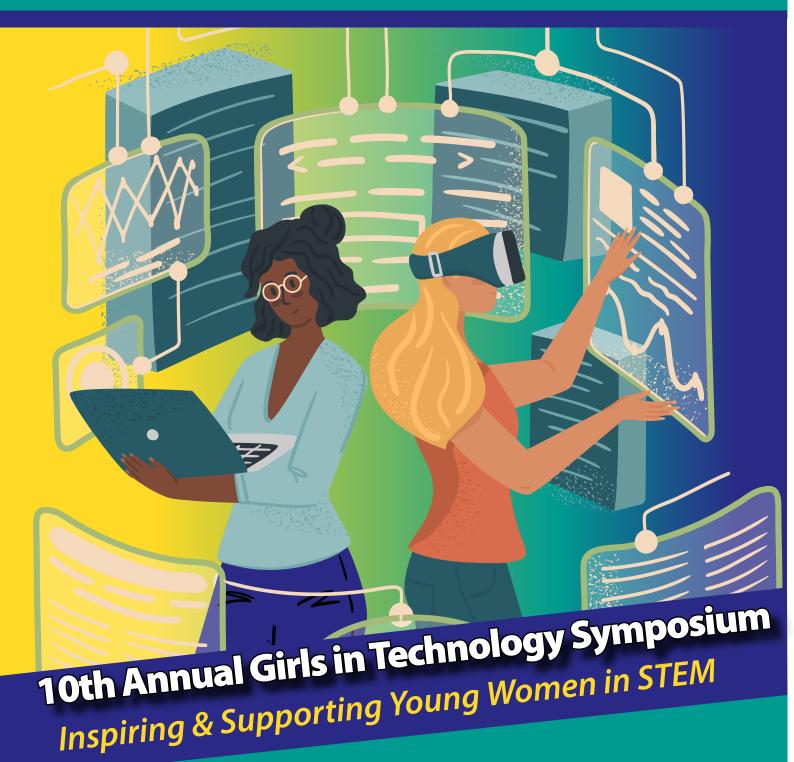
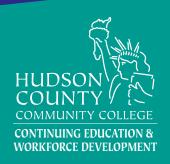
## HUDSON COUNTY COMMUNITY COLLEGE

School of Continuing Education and Workforce Development





Thursday, March 30, 2023 8:30 a.m. – 2:00 p.m. Culinary Conference Center 161 Newkirk Street Jersey City, NJ

#### **WELCOME TO**

## Hudson County Community College's 10th Annual Girls in Technology Symposium!

#### Dear Students:

On behalf of Hudson County Community College and the School of Continuing Education and Workforce Development, I thank you for joining us for #GIT2023 - the 10th Annual Girls in Technology Symposium!

We also thank your teachers, counselors, and administrators who encourage you to pursue your passion for STEM. As the program unfolds, we encourage you to engage and ask questions during our "A Day in the Life of Women in STEM" panel and STEM activities.

We hope you leave more inspired than before!

Chastity Farrell
Director, Continuing Education and Workforce Development





## AGENDA GIRLS IN TECHNOLOGY SYMPOSIUM - MARCH 30, 2023

Opening: Chastity Farrell, Director of Continuing Education and Workforce Development, Hudson County Community College	8:30 a.m. to 9:00 a.m. Busses Lobby Banquet Room	Student Check-in Guest Check-in Breakfast	TOTAL OSIGN MARCHOO, 2020
Hudson County Community College		Opening:	
Education and Workforce Development, Hudson County Community College		Welcome:	
Essay Contest Winner:   Grace Mejia, Jose Marti STEM Academy		Review of the Day:	Education and Workforce Development, Hudson County
PANELISTS: Nigar (Niko) Kazim, Software Engineer, Mondo.com Zobia Alvi, Creator and Web Developer, The Z Collective & Senior Technical Recruiter, DotDash Ashley Turner, Vitrual Design and Construction Manager, Engineering Operations, Project Controls Dr. Madhur Singal, Principal Scientist, Worldwide Safety Evaluation, L'Oréal Summer Jones, Assistant Vice President, Technical Support Services, Division of Information Technology, Montclair State University   MODERATOR: Sofia Ruseva, Environmental Assessor at UNYSE, LLC. and HCCC Student, Engineering Science   Coding Simon Says - Hands on Coding Color Matching Technology - HCCC School of STEM Origami Space Challenge - NJCU Ed Tech Doctors Augmented Reality - Creating an Instant Story - Membit and JC Fab Lab "Sensory/Expert + Instrumental Evaluation - Skin" and "Hair Care and Color Evaluation Techniques + Hair Grading" Science Activities - L'Oréal Activities Session 1   Activities Session 2   Activities Session 2   Activities Session 3   Activities Session 4   Activities Session 5   Activities Session 5	9:10 a.m. to 9:15 a.m.		Grace Mejia, Jose Marti STEM Academy
10:15 a.m. to 12:45 p.m. Scott Ring Room & Johnston Room 2nd Floor  Activities:  Coding Simon Says - Hands on Coding Color Matching Technology - HCCC School of STEM Origami Space Challenge - NJCU Ed Tech Doctors Augmented Reality - Creating an Instant Story - Membit and JC Fab Lab "Sensory/Expert + Instrumental Evaluation - Skin" and "Hair Care and Color Evaluation Techniques + Hair Grading" Science Activities - L'Oréal Activities Session 1 Activities Session 2 Activities Session 3 Activities Session 3 Activities Session 3 Activities Session 4 Activities Session 5  12:45 p.m. to 1:10 p.m. Scott Ring Room, 2nd Floor  Student Display Contests & Voting  Coding Simon Says - Hands on Coding Color Matching Technology - HCCC School of STEM Origami Space Challenge - NJCU Ed Tech Doctors Augmented Reality - Creating an Instant Story - Membit and JC Fab Lab "Sensory/Expert + Instrumental Evaluation - Skin" and "Hair Care and Color Evaluation Techniques + Hair Grading" Science Activities - L'Oréal Activities Session 1 Activities Session 2 Activities Session 3 Activities Session 3 Activities Session 3 Activities Session 5  Technology: Past, Present and Future"  HCCC Table - Recruitment, Early College, STEM  1:15 p.m. to 2:00 p.m. Branquet Room  1:20 p.m. to 1:30 p.m.  Presentation  Web 3.0 and Future Jobs of the Metaverse - Latinos in STEM  1:30 p.m. to 1:40 p.m.  Student Display Contest Winner Announced & Photos  2:00 p.m.  Dismissal	Banquet Room	Panel Discussion:	PANELISTS: Nigar (Niko) Kazim, Software Engineer, Mondo.com Zobia Alvi, Creator and Web Developer, The Z Collective & Senior Technical Recruiter, DotDash Ashley Turner, Vitrual Design and Construction Manager, Engineering Operations, Project Controls Dr. Madhuri Singal, Principal Scientist, Worldwide Safety Evaluation, L'Oréal Summer Jones, Assistant Vice President, Technical Support Services, Division of Information Technology, Montclair State University  MODERATOR: Sofia Ruseva, Environmental Assessor at UNYSE, LLC.
10:45 a.m. to 11:15 a.m. 11:15 a.m. to 11:45 a.m. 11:45 a.m. to 12:15 p.m. 12:15 a.m. to 12:15 p.m. 12:15 a.m. to 12:45 p.m. 12:15 a.m. to 12:15 p.m. 12:15 p.m. to 1:10 p.m.  Student Display Contests & Voting   "Technology: Past, Present and Future"  HCCC Table - Recruitment, Early College, STEM  1:15 p.m. to 2:00 p.m. Banquet Room  1:20 p.m. to 1:30 p.m.  Presentation  Web 3.0 and Future Jobs of the Metaverse - Latinos in STEM  1:30 p.m. to 1:40 p.m.  Presentation  Student Display Contest Winner Announced & Photos  2:00 p.m.  Dismissal	Scott Ring Room & Johnston Room	Activities:	Coding Simon Says - Hands on Coding Color Matching Technology - HCCC School of STEM Origami Space Challenge - NJCU Ed Tech Doctors Augmented Reality - Creating an Instant Story - Membit and JC Fab Lab "Sensory/Expert + Instrumental Evaluation – Skin" and "Hair Care and Color Evaluation Techniques + Hair Grading"
Scott Ring Room, 2nd Floor  ### HCCC Table - Recruitment, Early College, STEM  ### HCCC Table - Recruitment, Early College, STEM  #### Lunch Proceedings  ### Banquet Room  #### 1:30 p.m. to 1:30 p.m.  ### Presentation  ### Presentation  #### Bastern Millwork Apprenticeship & Intern Program  ### 1:40 p.m.  ### Student Display Contest Winner Announced & Photos  ### 2:00 p.m.  ### Dismissal		10:45 a.m. to 11:15 a.m. 11:15 a.m. to 11:45 a.m. 11:45 a.m. to 12:15 p.m.	Activities Session 2 Activities Session 3 Activities Session 4
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	1:40 p.m.		Student Display Contest Winner Announced & Photos
		Dismissal	

#### OPENING SPEAKER ESSAY WINNER



#### Grace Mejia, Jose Marti STEM Academy

Grace Mejia is a junior at Jose Marti STEM Academy. A driven high honor student, she has taken advantage of the most rigorous and challenging courses offered by the school. As a well-rounded individual, she participates in extracurricular activities where she has found comfort in the various groups of people she has met and learned from.

In school, Grace participates in several clubs and organizations where she serves as the secretary of the Biology Club and a writer for the STEM Journal. Most recently, she joined the JMSA's Theater Group where she serves as a crew member. Outside of school, she has participated in numerous STEM Programs including the Computer Science and Coding program at Fairleigh Dickinson University and the Real World Connection program at New Jersey Institute of Technology.

As an athlete, Grace is a Cross Country runner and a member of the Union City Team that won the Hudson County Championship in 2022. In the sport of Indoor Track & Field, she is a member of the Union City team that won the Hudson County Championship in 2023 and she is also part of the Outdoor Track & Field team.

Grace's goal is to attend medical school to become an anesthesiologist. A great achiever, Grace takes pride in excelling in her studies. She is among the top students in her class where she ranks number 5. She is an intelligent, motivated and compassionate young person who cares about her community and wants to be a productive citizen and contribute to the betterment of the world.

#### "A Day in the Life of Women in STEM"

#### **MODERATOR:**



Sofia Ruseva Environmental Assessor at UNYSE, LLC. HCCC Student, Engineering Science

Sofia is Environmental Assessor at UNYSE, New York's most experienced source for lead testing to comply with city, state and federal requirements. She is an EPA Certified Inspector, whose job is to examine residential properties for existence of any lead-based paint. She has interned with the Hudson County Economic Development Corporation (HCEDC), working in Climate Change Resiliency.

Sofia graduated from Hudson County Community College with an associate degree in Science in Spring 2022. She is currently attending HCCC again, pursuing a degree in Engineering Science. She is also the President of HCCC's Environmental Club.

#### **PANELISTS**



Zobia Alvi Creator & Web Developer, The Z Collective & Senior Technical Recruiter, DotDash

Zobia Alvi has experience in design, development, and business coaching since launching  $\underline{\text{Built by Z}}$  in 2015. Her expertise is in building websites for influencers, small businesses, and e-commerce brands. She has also developed products and services for entrepreneurs starting or growing their businesses in the online space.

Zobia is passionate about empowering women and is the founder of a <u>cosmetics brand</u> geared toward helping women start businesses in third-world countries. With a background in technical recruiting and education in computer science, marketing, economics, and entrepreneurship from Montclair State University, her goal is to reinvent the wheel constantly when it comes to solving new problems, innovating, and creating



Nigar (Niko) Kazim Software Engineer, Mondo.com

Nigar Kazim works as a software engineer in New York City. Her background is in social science and art. She began her journey in IT at age 27 by teaching herself everything she knows! She believes that one does not need a background in computer science and math to pursue a career in tech if she has the passion and discipline to learn on her own.

#### **PANELISTS**



#### Madhuri Singal, Ph.D., RRT, DABT

Dr. Madhuri Singal is the Principal Scientist – Product Safety at L'Oréal USA based in Clark, NJ.

Madhuri holds a Bachelor of Science (BS) degree in Respiratory Care from State University of New York Upstate Medical University, Syracuse, New York, and her Master's and Doctor of Philosophy (Ph.D.) in Molecular Toxicology and Environmental Medicine from the University of Rochester School of Medicine and Dentistry, Rochester, New York. After her graduate studies, Madhuri completed a post-doctoral fellowship at the Institute for Environmental Medicine at the University of Pennsylvania, where she focused on caveolin-1 and its effects on the lung during ischemia-reperfusion injury. Madhuri spent a majority of her career as a Registered Respiratory Therapist and continued to be part of our frontline workers in the fight against COVID-19 at the height of the pandemic. In addition, she is a Board Certified Toxicologist, having earned the credential of Diplomate of the American Board of Toxicology.

Prior to joining L'Oréal, Madhuri had a colorful career with the Research Institute for Fragrance Materials (RIFM), Mylan Pharmaceuticals, Reckitt Benckiser and Honeywell. In her role at RIFM, Madhuri led the worldwide Respiratory Science research program and was a critical member in the development of the 2-Box Air Dispersion Model. Also, while at RIFM, Madhuri was critically involved with computational fluid dynamics and Multiple Particle Path Deposition (MPPD) modeling which is important for systemic exposure and risk assessment via the inhalation route. Madhuri spent seven years at RIFM before moving on to Mylan Pharmaceuticals, where she honed her skills in risk and exposure assessments for respiratory drug products. Afterward, Madhuri moved on to further enhance her career aspirations at Reckitt Benckiser. During her four years at Reckitt Benckiser, Madhuri traversed various roles ranging from Research and Development Senior Associate to Manager of Inhalation Toxicology. At Reckitt Benckiser, Madhuri provided inhalation support for various products with a focus on risk assessment. Finally, Madhuri, took her career to the next level when she moved to Honeywell. At Honeywell, Madhuri held the role of Principal Toxicologist position for Performance Materials and Technology. There, she managed the toxicology testing programs for new and existing materials. She was critically involved in regulatory inquires, participation in external consortia, and addressing toxicology concerns with hazard communication. Through her work, Madhuri has published papers in notable journals.

In her current role as a Principal Scientist in Product Safety at L'Oréal, Madhuri is responsible for assessing the safety of raw materials and approving finished products to support market launches for brands that are still to be determined within skincare and photoprotection (sunscreen) projects. She also works in close collaboration with global Product Safety teams to ensure consistency and alignment of safety practices and processes.



Ashley Turner, PMP
Virtual Design and Construction Manager, Engineering | Engineering Operations
- Project Controls

Ashley is currently the Virtual Design and Construction Manager in an Engineering Operations Project Controls Unit. She is focusing on implementing the use of Building Information Modeling (BIM) throughout the Engineering Department to improve the collection of cost, schedule, and asset data. She is responsible for managing the process of virtually constructing a building and documenting the design contract documents while she plans, collaborates, and coordinates with the project teams throughout the duration of each project.

She has a Bachelor of Science in Mathematics and Civil Engineering from Spelman College and Missouri University of Science and Technology, respectively.

#### **PANELISTS**



Summer Jones
Assistant Vice President, Technical Support Services,
Division of Information Technology, Montclair State University

While studying Management Information Systems at South Orange's Seton Hall University, Summer Jones hopped on the technology revolution platform and never turned back. She envisioned all the ways tech could impact and improve everyday lives and decided to pursue it as a career. Today, Summer leads a team that nurtures a thriving technology environment supporting the 22,000 students, faculty, and administration at Montclair State University. Summer and her team are bringing tech to life for the University's Strategic Plan, "Connecting Tomorrow" – expanding remote services and migrating the campus classroom experience to 21st-century standards, all the while keeping the ecosystem secure against today's onslaught of bad actors. In addition to technical support across computer labs, mediated spaces, classrooms, and endpoint devices, she manages a \$5 million technology budget to manage technological projects, initiatives, and goals for the University. During the COVID-19 pandemic, her team was instrumental in moving the campus to a fully remote environment.

Summer stays close to the student population, serving as a role model for MSU's diverse community, and offering counseling and support as they pursue their studies. As a natural leader with a collection of personal successes, she is a highly sought-after mentor in the University's EOF Women's Leadership Academy. Inspired by the energy and creativity of the student population, Summer expanded her team with an internship program. Her interns gain hands-on work experience that plays well as they enter the workforce; she and her team gain arms and legs for ongoing projects and reverse mentorship in return!

In 2015, Summer moved back to South Orange. Ready to get into the housing market, she wanted to invest in a diverse community with an artsy and cohesive community feel. In 2019, she was elected to the City Council in the Township of South Orange Village. She is currently running for re-election. In this role, she has been instrumental in multiple development projects, including 270 Irvington Avenue and 133 Fairview Avenue, the relaunch of the "Gaslight" newsletter, the reimagining of the Cameron Courts, and the revitalization of Carter Park. She also has been appointed Acting Village President during times when the current Village President is unavailable to perform duties.

She has been very active in her community and was previously a member of the Board of Governors for the South Orange Performing Arts Center (SOPAC), where she was on several committees: Diversity in Programming, Development, and the Executive Board and Chair to the Marketing Committee. Village officials witnessed Summer's impact there – and recruited her to join the Management Committee for the South Orange Master Plan. During her downtime, you'll catch her in and around town with the SOMA Book Club, SOMA Sports and Social, and the SOMA Tech Collective. She is also a valued member of the NAACP of Oranges and Maplewood. She loves to travel extensively and grow her vegetable garden.

#### **ACTIVITIES**

#### Hands on Coding Blocks: Simon Says Coding

Students will use the Hands on Coding blocks to dive into the world of computer science and coding. Attendees will engage with block play, learn coding in a kinesthetic manner, and see just how easy it can be to get started with coding without the need for a computer or device. With the blocks available to put together algorithms and act it out, students will see coding come to life and experience how it can be a fun and engaging process. Come ready to play, learn and explore coding in a whole new way!



#### Color Matching Technology - HCCC School of STEM

Color matching is a critical aspect of various industries, including textile, paint, printing, and cosmetic manufacturing. The first step of color matching is to measure the color of the object to be matched by using a spectrophotometer. A spectrophotometer emits a beam of light on an object, and the reflected or transmitted light is collected by a detector. The detector converts the light into an electrical signal, which is then processed by the instrument's software. The software then provides the CIE Lab value, which is a quantitative measurement of the color.



#### Origami Space Challenge - NJCU Ed Tech Doctors

NASA has adopted the use of Origami to design and develop innovative ways of getting important materials out into space. The element of design is an important component in what they do, and they are always relying on the collaboration of scientists and artists/designers to create important components that make space exploration safely possible. For this activity, students will learn how origami is used to influence and improve the design. Teams of students collaborate to create origami boxes and use the design process and manual "algorithms" to complete a space mission challenge.



#### **ACTIVITIES**

## Augmented Reality – Creating an Instant Story - Membit and JC Fab Lab

The metaverse is here, and today students will create a spontaneous stage set and improvised narrative in Augmented Reality using Membit. Students will populate their classroom with 3D objects, graphics, and even video using only the phones in their pockets. A Membit Channel was created just for HCCC's GIT 2023, and students will create the content in about 20 minutes!







#### "Sensory/Expert + Instrumental Evaluation – Skin" and "Hair Care and Color Evaluation Techniques + Hair Grading" Science Activities

Students learn about the science of cosmetics and skincare directly from scientists who work at L'Oréal, the world's largest cosmetics company, which has developed activities in the personal care field concentrating on hair color, skin care, sun protection, makeup, perfume, and hair care. L'Oréal has set itself the mission of offering all women and men worldwide the best of cosmetics innovation in terms of quality, efficacy and safety.

Through hands-on activities, students will learn about the tools and science behind skin and hair product evaluation techniques, such as FE protocol including skin atlas grading, optical and sensorial attribute evaluation and measurement of skin hydration pre and post skincare application. Students will also explore product samples and hair color swatches on mannequins.

### ĽORÉAL

#### **ACTIVITY LEADERS**



#### Dr. Fahima Bacha

Fahima Bacha is a Secondary Mathematics Supervisor at North Bergen High School and an adjunct professor at New Jersey City University (NJCU). Fahima Bacha holds an Ed.D. in Educational Technology Leadership, a master's degree in Information Systems and an engineering degree in Computer Science. As an educational leader, she initiates change and promotes learning Science, Technology, Engineering and Mathematics (STEM). One of her accomplishments includes being selected as the "Featured Woman in Technology" at the HCCC Girls in Technology Symposium.



#### Kim Bae

Kim is Software Engineer at Google. Even though Kim earned a Bachelor of Fine Arts in Photography in college, she started her career in web and multimedia design and taught herself how to write code. She's been at Google for over 15 years and has worked on projects in multiple areas of the company doing everything from traditional front and backend work to data architecture and migrations. For the past 7-8 years she has specialized in web accessibility, working to improve the experiences of people with disabilities on the web. Her favorite programming language is Java. In her free time, she likes to hang out with her dog, explore all the food and culture NYC (and now Jersey City!) has to offer, travel around the world (67 countries and counting!) and scuba dive.

Kim's hometown is Chicago, Illinois and she graduated from the University of Illinois Urbana-Champaign.



#### **Baldween Casseus**

Baldween is Global Product Lead at Google. The one thing that truly fuels Baldween is growth; it is for that reason that she chose to pursue a career in Tech. For the past four years, she cultivated a specialty in Search Engine Measurement, Marketing and Optimization. She has worked across both Google and Microsoft platforms with experience in pharma, finance and luxury verticals.

Baldween's end goal was always to work for a company whose moral and ethical codes align with her own so that she can be an authentic storyteller and effectively communicate the value of their products through her work. Within her current role at Google as a Global Product Lead, she has been able to do just that. She works across Google's Measurement suite, developing and driving effective go-to-market strategies and product innovation for privacy centric data analytics and measurement tools and policies around the world.

Baldween's hometown is Bloomfield, New Jersey and she is a 2018 alum of The College of New Jersey (TCNJ).



#### Yavuz Guner

Yavuz Guner, serves Hudson County Community College as a full-time Instructor in the School of STEM. Instructor Guner holds a Master of Science degree in Cybersecurity from Saint Peter's University and a Bachelor of Arts degree in Business Administration from Koc University in Istanbul, Turkey. He is certified as an Ethical Hacker by EC-Council and Security+ certified by CompTIA. He teaches cybersecurity, ethical hacking, programming, discrete math and digital forensics. He is also pursuing a Ph.D. degree in Data Science at Saint Peter's University.



#### Morgan Lambert

Morgan is a Senior Scientist in Evaluation at L'Oréal. She has been at L'Oréal for nearly three years and has a trusted expertise in both clinical and instrumental study designs. She holds an MBS (Master of Business and Science) in Personal Care Science from Rutgers – completed in 2020. Before joining the cosmetic industry in 2017, she was a quality/analytical chemist at King Bio, a homeopathic pharmaceutical company. In 2018, she transitioned to her first role within the cosmetic industry as a Technical Service Associate for a raw material manufacturer and wholesaler of cosmetic ingredients, TRI-K Industries. In this role, she obtained comprehensive expertise in formulary sciences and was also given the opportunity to design and conduct small instrumental studies to support claimed benefits. With a newfound passion in instrumental evaluation, she transitioned to her current role within EI as it allowed for new expertise in both instrumental and clinical evaluation.

Morgan has executed new IE study designs and practices that capture and celebrate the spirit of Evaluation Intelligence, such as Hybrid Study Designs that require collaboration across EI Teams and long-term Multi-Week/Visit studies with SAQs to both strengthen and ensure consumer relevance. She has conducted extensive research and method development for Rinse Off Hydration IE that is both consumer and industry-relevant. She is driving, defining, and standardizing 'Inclusivity' in the Instrumental Evaluation Space with the implementation of Implementation ITA° for objective recruitment and sub-group analyzes and working with lab partners to define "representative panel" in accordance with their needs.



#### Sharmaine Latar

Sharmaine is an Scientist at L'Oréal. She joined L'Oréal in October 2016 as a Hair receptionist (contractor), booking and qualifying volunteers for testing. She has shown immense versatility and competency; further taking on additional tasks of coordinating samples for testing, managing digital accounts, and aiding in the management of the Expert Tag Pro initiative. Sharmaine has built many positive relationships and ways of working with key counterparts in the Team and the Labs that will be imperative for the success of this role.

Prior to joining L'Oréal, Sharmaine acquired her Cosmetology license from the Salon Professional Academy for Redken in 2012. Sharmaine has related experience from her coordinator positions at several hair and makeup salons managing clients and day-to-day operations while also keeping abreast with the latest trends and technologies for the beauty industry and customer service.

Sharmaine has been with L'Oréal for six years, most recently as the Senior Research Specialist for the Hair Care/Styling team within Evaluation Intelligence and has made significant contributions to R&I. Sharmaine plays an integral role within the Hair Care and Styling Expert team and is valued by her lab and PPM partners for her strong technical voice within the category. She demonstrates a thorough understanding of both the consumer and the stylist and incorporates this knowledge in all aspects of her work. She effectively communicates with her partners with clarity for key projects such as Heatless Straight and True Length, while proving to be agile and creative in response to challenges. Sharmaine demonstrates her strength as a strategist, where she effectively holds prioritization meetings and encourages collaboration across many Hair stakeholders. In these forums, she presents testing strategies, reports Expert analysis, and provides updates on testing capacity which has been critical in Expert Hair. In 2021, Sharmaine has established and solidified a partnership with the PPD NY Technical Salon through her contributions in the Dioxane Replacement project. As Sharmaine continues to grow and evolve in her role, she successfully trains and coaches others on her team in her previous responsibilities which in turn has positively impacted the growth of the entire Expert Care-Styling team. This past year, she stretched in her current role by supporting the skin consumer team in qualitative testing, vendor communication and presentations with international lab partners in China. In her new role, Sharmaine will be responsible for owning and leading key projects within the Hair Care-Styling category while affirming her strong technical voice, both locally and globally. She will broaden her knowledge into the hair color category and will partner closely with her Color & Texture counterparts.

#### 10th Annual Girls in Technology Symposium - Inspiring & Supporting Young Women in STEM



#### Dr. Clive Li

Clive Li is an engineering science instructor at Hudson County Community College. He is the inventor of the Biodegradable Diaper (patent #20170224540), the Eggshell Bio-composite (patent #20140323616), and the Wearable Aromatic Device (patent #20160174694). His research group at HCCC collaborates with researchers across several disciplines and utilizes different techniques, including plasma sputtering, scanning electron microscopy, X-ray fluoresce, electro-spinning, UV-visible spectroscopy and Fourier Transform Infrared spectroscopy. His current research is focused on biomaterials and nanotechnology.



#### Dr. Dana Smerda-Mason

Dana Mason is a technology teacher with the Bayonne Board of Education, and an adjunct professor at New Jersey City University. She holds a bachelor's degree in Music Performance from New York University, and is an alumna of the educational technology doctoral program at New Jersey City University. She is passionate about combining the arts with technology for an engaging 21st century approach to learning. In 2021, she was awarded as Teacher of the Year for her school, and recently became a finalist for the Albert Einstein Distinguished Educators Fellowship.



#### Michelle Megala

Michelle Megala is the President and CEO of Hickory Industries, a U.S.-based manufacturer of rotisserie ovens and other specialty kitchen equipment. Michelle was raised in Elizabeth, New Jersey, and graduated from Boston University in 2019. Growing up in a multicultural household with a mother from Colombia and a father from Egypt, Michelle learned the value of diversity and inclusion. She is passionate about technology and uses it to manage large amounts of data in her manufacturing role. Despite facing challenges, Michelle continues to lead Hickory Industries and honor her father's legacy. She believes that technology has the power to empower women and girls by increasing access to education and facilitating communication across the globe. Michelle encourages young girls interested in technology to be confident in their abilities and know that they are capable of leading industries and shaping the future.



#### Karina Mitchell

Karina is the Co-Founder and Vice President of Membit. Karina Mitchell specialized in augmented reality and has a background in art, technology and community building. She has helped bring five augmented reality applications to market. Her international collaborations using 3D environments, audio, video and scripted art have been noted by academics in MIT presentations, Dartmouth E-media studies, and as part of an exhibit featured in the Oxford Handbook of Virtuality.



#### **Eric Nadler**

Eric Nadler is the founder and head of design studio Towhee Co. and makerspace JC Fab Lab. At Towhee, he designs wearables, clothing, electronics, digital front-ends and experiences, and audio electronics kits. He fabricates installations and editions for artists and finds materials that are awesome. At JC Fab Lab, he creates curriculum for adults and kids in design, science, and the arts. He has been an AR/XR/VR designer and developer since 1992, as well as a filmmaker, game designer and programmer. His XR work includes a balance disorder therapy application and a surgery training platform for NYU Med School and DARPA. Currently, he is at work on a staged narrative with a production planned for an XR environment and IRL stage. Eric has a master's degree from NYU's Tisch School of the Arts (ITP). He has taught at Cal Arts, NYU ITP, and now teaches at JC Fab Lab. Eric swims, surfs, and rows as often as possible, and is doing his part to be a dad to a 14-year-old who loves punk rock and laser cutters.

#### 10th Annual Girls in Technology Symposium - Inspiring & Supporting Young Women in STEM



#### **Marcos Navas**

Marcos Navas has been an active member of the Ed Tech space for over two decades. As an advocate for raising the voice of students, Marcos is one of the original Flipgrid ambassadors and a TED-Ed Innovative Educator helping spread student TED Talks via TED-Ed Clubs. Within the coding and STEM space, he is one of the original Raspberry Pi Certified Educators in the U.S. helping enable people of all ages to explore computing and one of the original founders of Hands on Coding. Marcos completed a fellowship with the IDEO Teachers Guild, making him one of 10 educational experts trained in Design Thinking. He also founded EdCampUrban, a free professional development program for urban educators/teachers implemented by teachers, and Latinos in Coding, a nonprofit whose mission is to increase awareness and participation of the Hispanic community in computer sciences to remedy the equity gap of Latinos in STEM. Marcos is on a mission to transform educational environments to give access and teach underserved children about technology as early as possible.



#### Paulina Porembska

Paulina Porembska joined L'Oréal in June 2021, as a Scientist of the Sensory-Expert Evaluation Intelligence team. During this time, she has been responsible for evaluating the performance and sensorial attributes of skincare products for the DA and DEV teams. Providing this informative feedback has supported critical decision making and problem solving throughout the development and formulations processes.

Paulina has 9+ years of product development experience within the fashion industry, where she focused on trends and innovative design throughout many apparel categories. She has also leveraged her Esthetician's license at several New York and New Jersey facial spas as a lead Esthetician and product influencer.

Paulina received her B.A. in Fashion Design from the Fashion Institute of Technology in NYC, as well as her esthetic diploma from the Christine Valmy International School of Esthetics in NYC. She has a passion for the cosmetics/skincare industry, and in her free time enjoys party planning, cooking, and traveling.



#### Nicole Totorello

Nicole Totorello joined the Expert Hair team at L'Oréal in El as a Scientist in January 2023. Nicole is responsible for the evaluation and the performance analysis of hair color and lightening products. Nicole has a B.S. in Business and a minor in Marketing from New Hampshire University, as well as a cosmetology license. She brings with her more than 15 years of hair industry experience working as a hair artist and educator.

Prior to joining L'Oréal, Nicole managed the Beyond the Fringe Hair Designs salon in Hillsborough, New Jersey, where she successfully and consecutively grew business revenue annually and increased team efficiency and productivity through the implementation of creative technology solutions. Additionally, she developed and led all educational training programs for her team based on her strong expertise on the Redken and Pureology brands.

In her position within the Hair team, Nicole leads the Expert evaluation plans for Hair Color Competitive Analysis as well as DA Color and Bleach projects. Nicole also explores new opportunities and capabilities for the team through method development including in-vitro swatch analysis and digital support for color reading, while integrating the stylist voice into our testing plans.



#### Michelle Vera

Michelle is an ESL Instructor at Hudson County Community College. She teaches remote and in-person courses to adults of different ages, creating presentations and activities to keep students focused, engaged, and motivated. She teaches both English language and English research and currently is developing courses in Latin American Literature, with a focus on branching beyond the canon to showcase the diversity of Latin America. Previously, she worked as a Museum Educator for Tenement Museum, educating visitors about the lives of the working-class families who lived there, and the historical context relevant to their stories, and relevant to our lives today. She was also a Museum Educator for the Museum of the City of New York, where she taught students of mixed grades about the colonial history of NYC through storytelling and kinesthetic activities including sensory exploration with replicas of ancient artifacts.

Michelle has a Master of Education in Teaching English as a Second or Foreign Language from the City College of New York and a Bachelor's Degree from Rutgers University in Latin American Studies, Political Science, and Woman and Gender Studies.

#### **PRESENTATIONS**



#### Jobs of the Metaverse

Presented by: Marcos Navas, Latinos in Stem

Web 3.0 is bringing many new technologies and ideas. One of those is the Metaverse, 3D immersive worlds that can be used for entertainment, learning, teaching, socializing, and WORK. In this session, we will discuss the future jobs the Metaverse is creating, and analyze where you think you fit in these worlds called THE METAVERSE!



## Eastern Millwork, Inc., Holz Technik Apprenticeship and Internship Program

Presented by: Amber Gutierrez and Heiko Sieling, Eastern Millwork

Eastern Millwork, Inc. (EMI) has entered into partnership with Hudson County Community College (HCCC) to implement a joint federally registered apprenticeship program, Holz Technik. Apprentices that complete this earn-while-you learn program will climb the career ladder at Eastern Millwork and acquire an associate and bachelor's degree without any college debt. Eastern Millwork invites applications from qualified graduating high school students. In this model, apprentices hired by EMI will split their time between work and school. At the end of the apprentices will be awarded an A.A.S. in Advanced Manufacturing from Hudson County Community College, earn a bachelor's degree in Technical Studies from Thomas Edison State University, and earn a salary of \$70,000 as an Engineer. High school juniors who are interested in the apprenticeship program have an opportunity to apply for a paid internship program during the summer, for up to 3 weeks. Please go to <a href="https://www.easternmillwork.com">www.easternmillwork.com</a> for more information.

#### **DISPLAY CONTEST ENTRIES**

#### "Technology: Past, Present & Future"

#### The History of Hair Products

Bayonne High School, 10th Grade Mary Akjnoukh, Jayla White

This project is about the application of technology in hair and its related products. The group will be analyzing the introduction of hair products and the development of their use. In addition, the science and history of using hair products in theory will be covered. The group will also discuss their expectations for future technology and hair product needs.

#### **Telephone Evolution**

Jose Marti STEM Academy, 9th Grade Wendy Martinez, Carolyn Ewy, Ashley Rojas

This project presents historical and technological perspectives on the telephone. The two most important aspects of the project are how the phones were introduced and what kind of technology is required to function the phones. The group will talk about navigational breakthroughs, phone technology, and an evaluation of upcoming cell phones.

#### **Prosthetics**

Jose Marti STEM Academy, 9th Grade Melay Euceda, Jessica Irtuz

This project explores the history of how prosthetics have helped people live better lives. Prosthetics are artificial body parts that can either replace or improve upon a natural body part's functionality. There are various ways that the field of prosthetics is expanding and going into the future on the basis of the new and swiftly developing electronic and polymer technologies.

#### **Wheelchairs**

Jose Marti STEM Academy, 9th Grade Valentina Garcia, Victoria Guzman

The use of wheelchairs is essential for many disabled people. The goal of the initiative is to improve technology so that wheelchair users can gain from it. The PAPAW technology, which can assist both patients and those who are unable to operate a wheelchair, will be discussed by the group.

## Use of Assistive Tech to Enhance Social Skills for People with Autism Spectrum Disorder

Explore Middle School, 7th Grade Samantha Mursuli and Melody AndesPhillips

This research focuses on diagnosing people with autism spectrum disorders and providing them with technologically assisted preventive measures. The development of new social skills for autistic people is made possible by technology. The study will concentrate on interactive smart devices and their advantages for people with autism.

#### **Music Development with Technology**

Marley Amy, Nia Jackson, Gabriella Massa Explore Middle School, 7th Grade

This project will address the technological advancements in music. The project will be presented with a variety of themes, including gramophone, radio, vinyl, CD, and more.

### Past, Present and Future of Autonomous Vehicles

Explore Middle School, 7th Grade Lori Kim, Charlisse Bums, Alexis Rich

Autonomous vehicles are the focus of the project. How automobiles were created and how they have changed over time will be discussed in the project. Also, the idea of the advantages and drawbacks of autonomous vehicles will be shared with the examples of the history and future revolutions.



## Summer Youth & Teen Programs

**HCCC** Department of Continuing Education

#### Make new Friends at HCCC!



ALL SUMMER YOUTH PROGRAMS TAKE PLACE ON OUR MAIN CAMPUS **AT JOURNAL SQUARE** 

#### July 10 — August 25

Both middle school and high school students experience a variety of engaging and enriching programs at Continuing Education's Summer Youth & Teen Program. Our unique one- and two-week, hands-on programs are offered in partnership with the College's Division of Academic Affairs, and Culinary Arts Institute. Programs emphasize self-discovery, cognitive reasoning, and cooperative thinking using a hands-on approach.

Choose from any of our Culinary Arts programs, SAT Test Prep classes, CPR, and Photography offerings. Ages 9 - 15 YRS OLD

#### DIGITAL PHOTOGRAPHY

Monday - Thursday July 10, 11, 12 & 13 9 a.m. – 4 p.m. (1 hour lunch) \$270

#### **CPR & FIRST AID FOR TEENS:**

Monday - Thursday July 17, 18, 19 & 20 9 a.m. – 4 p.m. (1 hr. lunch) \$270

#### SAT PREP

#### RECOMMENDED AGES: HIGH SCHOOL STUDENTS

July 24 - August 3

Monday - Thursday \$275

**Duration: 24 hours** 

#### **SAT LA PREP**

9 a.m. to 12 p.m.

#### **SAT MATH PREP**

1 p.m. to 4 p.m.

#### **IN-PERSON CULINARY ACADEMY BAKING I - \*4 DAY WEEK\***

July 31, August 1, 2, & 3, 2023 9 a.m. - 4:00 p.m. (1 hour lunch) \$355

#### **BAKING II - \*4 DAY WEEK\***

Dates: August 7, 8, 9 & 10 Times: 9 a.m. – 4:00 p.m. (1 hour lunch) \$355

#### **COOKING CULINARY PROGRAM COOKING I - \*4 DAY WEEK\***

Dates: August 14,15, 16 & 17 Times: 9 a.m. – 4:00 p.m. (1 hour lunch) \$380

#### COOKING II - \*\*\*FULL WEEK\*\*\*

Monday - Friday August 21, 22, 23, 24 & 25 9 a.m. – 4:00 p.m. (1 hour lunch) \$485



## TO REGISTER: https://tinyurl.com/HCCCSummerYouth

Contact (201) 360-4224 or cquerra@hccc.edu



#### **Registration now for the Summer and Fall Semesters** at HUDSON COUNTY COMMUNITY COLLEGE.

All high school students in Hudson County are able to take any course at the college they are eligible for at 50% off the in-county tuition rate, with most fees waived (except culinary and lab fees), which means you take a 3-credit course for only \$223.50!

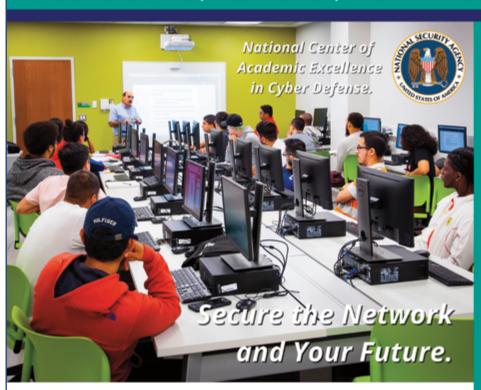
Choose among our fully online courses, remote courses that you can take live after school or during the weekend or our safe in-person courses.

Take a look at the class schedule at <u>www.hccc.edu/schedule</u> to see if there are any courses that interest or contact <a href="mailto:earlycollege@hcccedu">earlycollege@hcccedu</a> to discuss getting started today!

## CYBERSECURITY (COMPUTER SCIENCE)

Associate Science (AS)

SCHOOL OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS





#### **Contact Information**

Aljamal, Faisal
263 Academy Street,
Room S405A
Jersey City, NJ 07306
(201) 360-4746
faljamal@hccc.edu
stemprograms@hccc.edu



PROGRAM



CYBERSECURITY



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## Build a Rewarding Career!

## **Associate in Applied Science (A.A.S.)** in Construction Management

#### Who is a Construction Manager?

Construction managers plan, coordinate, budget, and supervise construction projects from start to finish.

#### What do the students learn in the program?

 AAS Program is a two-year 60 credit program designed for students who will learn to manage all phases of modern-day construction.

#### Students will take the following courses:

- Introduction to Engineering Science and Calculation
- · Introduction to Basic Structures
- Construction Procedures, Material and Testing
- · Surveying and Site Planning
- Construction Codes
- Construction Project Management
- Cost Estimation
- Construction Project Planning and Control

#### Pay

The median annual wage for construction managers was \$98,890 in May 2021.

#### Job Outlook

Employment of construction managers is projected to grow 8 percent from 2021 to 2031, faster than the average for all occupations.

About 41,500 openings for construction managers are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

More information may be found at: https://bit.ly/2Sat1sm

#### For further information, please contact:

Dr. Azhar Mahmood (Program Coordinator – Construction Management) (201) 360-4259 or <a href="mailto:amahmood@hccc.edu">amahmood@hccc.edu</a> School of Science, Technology, Engineering, and Math (STEM) (201) 360-4265 | 263 Academy St., Jersey City, NJ 07306

Contact Admissions at: (201) 714-7200 OR <u>admissions@hccc.edu</u> Apply at <u>www.hccc.edu/apply</u>





WWW.HANDSONCODING.ORG

## HANDS ON CODING

Building the Future, One Block at a Time: Hands on Coding for 21st Century Skills

#### **ABOUT US**

At Hands on Coding, our mission is to help prepare students for a digital future by providing them with the tools and resources they need to develop 21st century skills. We believe that coding and technology can be used as a tool to help foster creativity, critical thinking, problem-solving, and collaboration, which are all essential skills for success in today's world. Our physical coding blocks and workshops are designed to make coding accessible and fun for all students, regardless of their background or experience. Our new merch store and professional development offerings allow educators to integrate 21st century skills into their teaching and empower them to prepare their students for a rapidly changing world. With the creation of Latinos in Coding and our metaverse platform, we're further expanding our reach and ensuring that all communities have access to these essential skills.

# HANDS JN GOD AIG

#### **OUR SERVICES**

Hands on Coding offers Hands on Coding Blocks: Our flagship product is a physical coding block set that provides a hands-on learning experience for students of all ages. These blocks serve as a low-barrier entry point into computer science and can be used to create algorithms, programs, and more.

WORKSHOPS/PROFESSIONAL DEV.



We offer a range of workshops and professional development opportunities that can be customized to fit the needs of any organization or group. Our team of experienced educators and technology experts can provide training in coding, 3D design, and more.

#### LATINOSINCODING.ORG



Our non-profit organization is dedicated to increasing awareness and participation of the Hispanic community in computer sciences. We provide educational programs in the latest technologies to motivate individuals to pursue careers in the industry.

#### **METAVERSE**



Our immersive 3D platform powered by FrameVR allows for collaboration, education, and entertainment in a virtual environment. We provide a variety of onboarding services to get organizations and individuals up and running in the metaverse.

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