2020 Houston Affiliate Award Celebration

Houston, TX♦ February 29th, 2020

HOUSTON AFFILIATE THANKS OUR SPONSORS

WELCOME

Dr. Timothy Redl

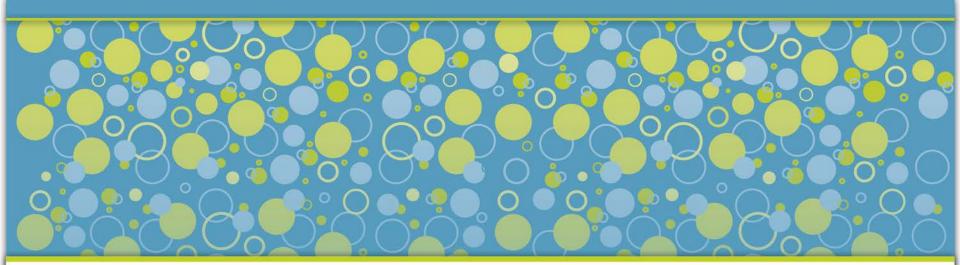Associate Professor of Mathematics

and Assistant Chair

University of Houston - Downtown

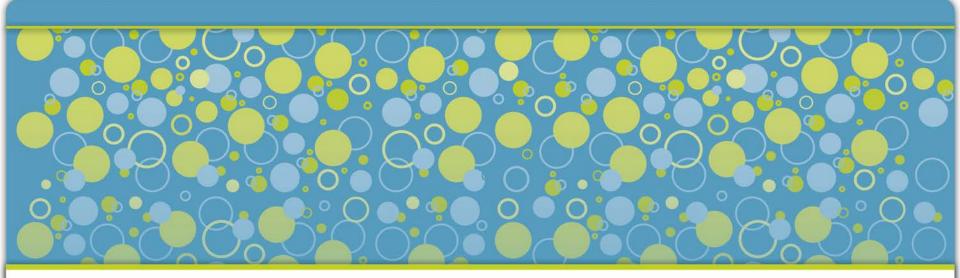# GREETINGS

Dr. Juan Sanchez Muñoz

President

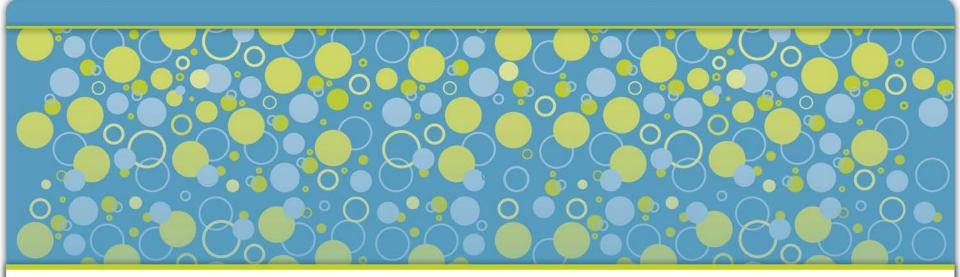### University of Houston - Downtown

Greetings from Schlumberger by:

Ms. Paula Harris

Director of Global Stewardship/
Educational Programming
Schlumberger

Award Presentation
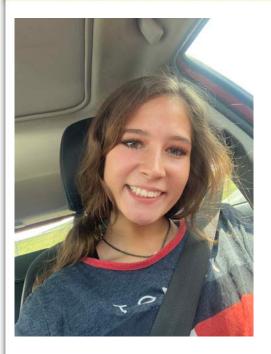# by
Dr. Timothy Redl - UHD

Rising Stars

Mairim Alvarez Pausa
Westside High School

Lear Ennis
Montgomery High School

My name is Lear. I go to Montgomery High School and I am involved in BPA (Business professionals of America), UIL (University Interscholastic League), and Cyber Patriot. My intrest in technology has grown the past two years and so has my knowledge. I am on the track to graduate High School in 2020 and plan to go to Texas State University for a Computer science degree.

Sadaf Khan
Harmony School Of Advancement - High

Sadaf is a high school student who loves coding. Her greatest technical accomplishment is making a website for a deaf, dumb, and blind school India. In the future, she wants to do something that involves biochemistry and computer science. She will be attending college next year. She would like to be studying more coding languages.

NCWIT
Aspirations in
COMPUTING

Eliza Khan
Memorial Senior High School

Eliza is a kind, hard-working, and determined young woman who is passionate about helping others with the use of technology. In the past she has made several websites, games, interactive sketches, and robots. She also worked as an entrepreneur, creating business cards and small toys. Eliza's future goals are to go to MIT and get a degree in computer science. In addition to that, she would like to be established in law, business, architecture, and medicine. Eliza's greatest technical accomplishment was building a solar powered robot.

NCWIT
Aspirations in
COMPUTING

Patricia Kurniawan
Clements High School

NCWIT
Aspirations in
COMPUTING

Lauren Perez
Bridgeland High School

Very interested in coding and computers in general.

Will be attending a community college for 2 years

than going to a 4 year college, I would like to be
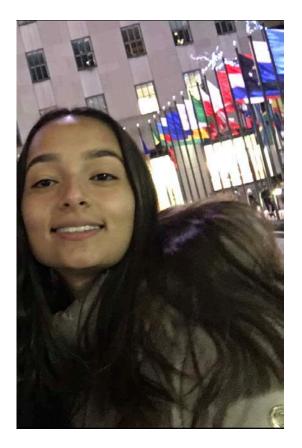
studying computer science.

Andrea Ruiz
George I. Sanchez Charter School - North

Andrea is a 14 year old freshman High school student that is a very hardworking student. she has shown a lot of potential and dedication throughout her time in George I AAMA Sanchez north. she was given the title of student of the year for her 7th and 8th grade year. she is always punctual and on time. Which allowed her to receive awards for perfect attendance for the past 3 years. she was also the vice president of National Junior Honor Society and is the current Treasurer of National Honor Society. she was a part of an enrichment program that provided her with some classes on computer science and she was taught how to create her own website. she plans on attending a college or university although she isn't quite sure of what she wants to study although she is indeed interested in business or in law. she hopes to figure out her career path while in high school.

NCWIT
Aspirations in
COMPUTING

Bianca Sendra
Bellaire High School

Ellery Strength
Bellaire High School

Ellery enjoys helping people and would like her career to reflect that. After college, Ellery would like to pursue a job in programming, in which women are largely unrepresented and dismissed, to represent and stand up for those who don't often get to have a voice. She would like to help developing countries by providing them with technology that is not often available to them and teaching them how to use it. Ellery recently traveled to Bolivia and Peru to assist with a clinic for underprivileged children. This helped her to obtain a global perspective and experience the beauty of foreign cultures.

NCWIT
Aspirations in
COMPUTING
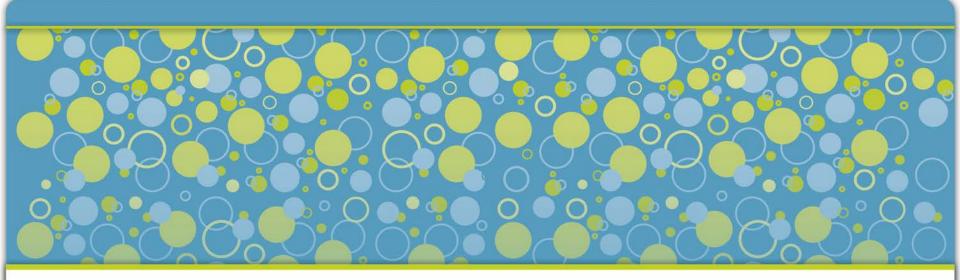
Kyra Terez
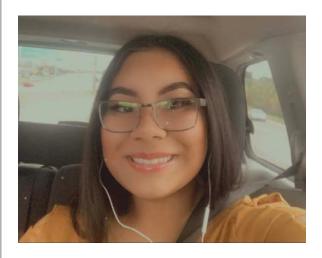# William B Travis High School

Kyra is the most proud of working with two other girls to create a Girls Who Code organization at her high school. She plans on continuing to complete more computer science projects, possibly a mentor program by becoming an AspireIT leader. She hopes to attend a college in the future majoring in computer science.

NCWIT
Aspirations in
COMPUTING

Honorable Mentions

Alexa Aguirre
Milby High School

The greatest technical accomplishment has to be learning about how to fix stage lights by programming the light board. Plans for the future include going to LIM college to study business administration in the fashion industry and minor in cosmetics.

NCWIT
Aspirations in
COMPUTING

Amy Brink
Cypress Woods High School

This is Amy from Cypress Woods High School. She is looking to major in computer science and is currently exploring the computer science world in order to find her place within it. She has been taking computer science courses, as well as participating in computer science activities and online courses, since freshman year of high school. Her greatest technical accomplishment was making into First Bytes at the University of Texas at Austin then creating a light show with her team members within only a week. Amy would love to attend to explore her career options and the world of computer science through the University of Texas at Austin due to the technology boom currently happening in the city. Amy would most like to explore data science and cyber security as it most relates to her love for statistics and being involved in the world around her.

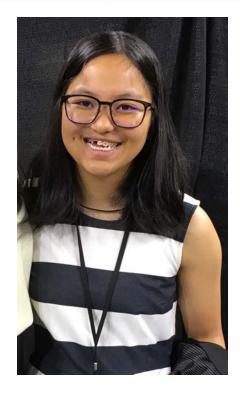NCWIT
Aspirations in
COMPUTING

Mikayla Bukenya
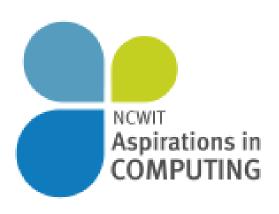## Harmony School Of Advancement - High

Mikayla competed in the CodeQuest and received 3rd place with her partner.

She is the lead programmer of her FIRST Robotics team.

During the Computer Programming Club, she helps teach students how to code in Java.

NCWIT
Aspirations in
COMPUTING

Marion Creekmore
The Woodlands College Park High School

Marion is a Junior at The Woodlands College Park High School. She has been learning Computer Science for three years. She has been to multiple computer science camps and is in FIRST Robotics. Along with FIRST Robotics, she has participated in Science Fair and Science Olympiad. She hopes to work on projects involving Artificial Intelligence in the future.

NCWIT
Aspirations in
COMPUTING

Kristine Dang
Bridgeland High School

Elsa Davila
San Augustine High School

Elsa Davila is a junior at San Augustine High School. After graduating, she plans to attend Texas A&M University and major in Science in Visualization.

Michelle Ding
Dulles High School

Alejandra Gonzalez
Summer Creek High School

Alejandra has helped her robotics team advance to state competition in Austin, Texas. In robotics she is the head of marketing and is in position to be president. Alejandra has also participated in regional science fair and district history fair. Her extracurricular activities include marching band during football season, concert band throughout the school year, and even student council. She also finished her freshman year with all A's and a 5.129 GPA. Alejandra was also accepted into her school's Science National Honor Society as a freshman. She is ranked in the top 8% of her graduating class. After high school graduation, she plans on perusing a Masters degree in aerospace engineering at the University of Texas.

NCWIT
Aspirations in
COMPUTING

Jessica Kim
North Shore Senior High School (Texas)

NCWIT
Aspirations in
COMPUTING

Phoebe Lin
Dulles High School

Phoebe is a sophomore at Dulles High School who aspires to major in Computer Science after high school at Rice. One of her greatest accomplishments is her promotion to 1st-degree black belt last semester. It also serves as an example that demonstrates the effort and determination she is willing to apply to earn long term goals in computing such as a career in STEM in the near future and making apps in her free time.

NCWIT
Aspirations in
COMPUTING

Kanimozhi Manickavasakam
Glenda Dawson High School

Kanimozhi currently attends Glenda Dawson High school as a junior who is very interested in the world of STEM. She aspires to become a successful female leader in her community and hopes to excel in a field that is traditionally dominated by men. She plans on attending a four year university to major in engineering and computer science. She has completed a four year summer program, Houston PREP. This program focused on teaching young students the computer skills necessary to evolve in the STEM field. She learned to use the languages java and python as a result of attending this program which furthered her interest in the STEM field. In this program she had the opportunity to build a robot from scratch and code it to complete various tasks. She also attended, ACE (Architecture, Construction, and Engineering), a mentorship program, where she had first-hand experience of a structural engineering role. In that role, she contributed to the design process of a transportation hub. She earned the second place award in a regional competition for the work she did over creating the structure of a transportation hub. She also learned to use different company tailored software programs such as Revit giving her experience with real word applications. What also prompted her interest in the STEM field was the concerning ratio of females to males. Being able to create a difference as a woman is one of her greatest goals in life, and she wants to do so through experience in the computing world.

NCWIT
Aspirations in
COMPUTING

Aaliyah McAfee
Energy Institute High School

Lillie McAndrew
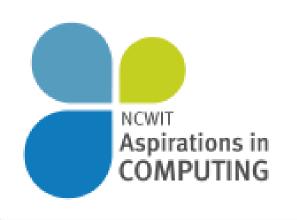**Ridge Point High School**

Julia Nwokedi
Lawrence E Elkins High School

Julia's greatest technical accomplishment is creating a 3d animation in the Alice 3 software that reflects on real-world issues. Her future plans are to create a complex video game. After university, she will become a software engineer, an astrophysicist, or a combination of the two.

NCWIT
Aspirations in
COMPUTING

Beth Perkins
A & M Consolidated High School

Beth Perkins is a senior at A&M Consolidated High School in College Station, Texas. She began coding her freshman year when she took a Computer Programming class.

She discovered that she loved programming and went on to take Computer Programming 2. Last summer she had the privilege of attending Code Longhorn, a programming camp held at the University of Texas at Austin.

She is currently a member of Business Professionals of America, and next month she will be competing in Java Programming at the state level. This fall she will be attending Brigham Young University and majoring in Computer Science. She is the oldest of six siblings and lives to spend time with them, read books, and hike in the mountains (which is why she has to leave Texas for college).

Kailey Perrino
Ridge Point High School

Kailey is a sophomore who is in number three in her class. She has taken two computer classes and is currently in a mobile application development class. She understands how important technology is for a successful future, which is why women must have an opportunity to participate in STEM programs. Additionally, she is in the computer science national honor society, tech innovation, and is part of the Ridge Point golf team.

NCWIT
Aspirations in
COMPUTING

Karah Phang
Saint Thomas' Episcopal School

Karah is a high school student who loves coding. She completed year 3 of the 4 year STEM program at the UHPrep, where she has learned so much about coding, robotics, and engineering. She plans to complete the 4 year STEM program. In the future, she wants to go into computer science and computer engineering. She would like to learn how to code games and algorithms that will help people out and engineer machines that can aid people with disabilities.

NCWIT
Aspirations in
COMPUTING

Athulya Saravanakumar
Dulles High School

Athulya Saravanakumar is a very passionate programmer. She started programming at the age of 8, after being inspired by documentations and books on technology. She has learnt parts of JavaScript, HTML, CSS, Python, and now is currently learning Java. For her first computer science competition ever, she placed 25th as a group. She will continue to go to competitions to learn more and place higher. She would like to become a robotics engineer, using her programming skills to create robots. She will most definitely be attending collage that can further her knowledge in the technological world.
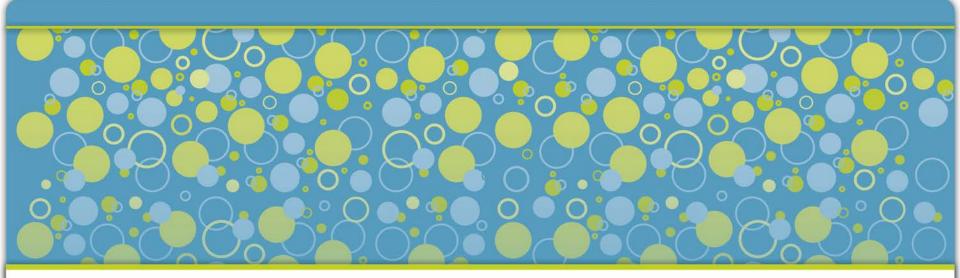
**Rajvi Shah
Clements High School**

Faren Thompson
Energy Institute High School

NCWIT
Aspirations in
COMPUTING

Winners

Olivia Bangs
The Village School

Olivia is a high school senior in Houston, Texas. She became interested in computer science after taking her school's introductory course in tenth grade and is currently taking IB Computer Science HL. She brings her interest in computer science outside of the classroom through co-leading her school's Girls in CS club. In 2019 she competed in the Conrad Spirit of Innovation Challenge's Transforming Education Through Technology category and won first place with her team. She then went on to present about student innovation at the 2019 International Society for Technology in Education Conference. In 2019 she also competed in the Offshore Technology Conference's Energy Challenge and won first place with her team. In her free time she works with startups to improve their social media marketing and online presence. She plans to pursue a computer science major in college and is considering specializing in cyber security.

NCWIT
Aspirations in
COMPUTING

Sophia Bebawi
William B Travis High School

Sophia's greatest technical accomplishment to date is creating an app with a team for the 2019 Technovation Challenge that gave students access to expert advice on how to deal with their anxiety and manage their stresses. One of Sophia's greatest aspirations is to go to college.

NCWIT
Aspirations in
COMPUTING

Yureli Bustos
Westside High School

Michelle Chan
North Shore Senior High School (Texas)

Currently a sophomore at North Shore Senior High, Michelle has a keen passion for STEM. She is now taking Pre-AP Computer Science and plans on continuing to the AP course next year to learn even more in Java and other programming languages. Additionally, Michelle is highly involved in Math & Science Club at her school and actively participates in TMSCA and UIL competitions. She has even won 1st place in Calculator Applications over all grades and school divisions in TMSCA State during her freshman year. In the future, she plans on majoring in engineering and computer science. With her strong mindset, Michelle hopes to enrich the STEM field with diversity and ingenuity.

Isabella Chan Tack
North Shore Senior High School (Texas)

Isabella aspires to become a software computer programmer. Her early experience in being introduced to computer science was when she first started using scratch in elementary school, and soon became exposed to new and other exciting languages such as Java and Python. One of the achievements that Isabella is very proud of is her second-place award in a district scratch competition. The theme was "dance off," and the project was also an assignment for her eight-grade comp sci class. Isabella is also proud of achieving first place in another scratch competition called "Scratched The Surface" hosted by the Fort Bend ISD and Code Ninja in January 2019. The requirement was to create an Escape Room-like game and it was a partner project. Isabella was responsible for creating the sprites, debugging the game, and creating some codes for the program. Isabella and her partner won the first-place prize and were awarded a free enrollment for a programming course which taught JavaScript. Isabella is currently attending Elkins High School, and she is taking classes in computer science to learn more about Java and improve to her skills.

In the future, Isabella plans to create her very own video games and entertainment programs for many others to enjoy. She also hopes to find a way to integrate her hobbies, such as sewing and art, with computers and programming so she can enjoy all of them at the same time. Isabella wants to become a software programmer with a big focus on entertainment. She plans to attend a 4-year college, and aspires to study game design, as well as building computers.

NCWIT
Aspirations in
COMPUTING

Vanna Chen
Clements High School

Vanna is the vice president of Girls in Computing. She served as the coordinator of a volunteer program teaching kids Java called Fort Settlement Middle School Coding Club 2018-2019 where she created a new curriculum, materials, and lesson plans. Presently, she is the vice president of Girls in Computing and hosts weekly workshops where she teaches underclassmen game design and marketing. Recently she published her first app, a visual novel style rpg game featuring original story and artwork, to the Google Play Store and is looking to expand it's availability to other platforms. She plans to study computer science in college to prepare her for eventually creating her own tech startup.

National Honorable Mention

NCWIT
Aspirations in
COMPUTING

Precious Elele
Sharpstown International School

Clarisse Forro
Young Women's College Preparatory Academy

Clarisse Forro is a member of the National Honor Society, National Society of Black Engineers, Texas Alliance for Minorities in Engineering, Society of Women Engineers, Ignite, and First Tech Challenge. Clarisse currently holds an important executive position as the Student Council Secretary and committee chair for community and school service, where she gained valuable leadership skills. Outside of school, she tries to give back to the community by volunteering at a retail store that sells donated clothes at Second Blessing. Clarisse had also volunteered at the Chinese Community Center, where she supervised kids. At Jungman Library, where she places and sort books. Every last Wednesday of the month, she participates in Teen Court, where she will experience and learn valuable skills. Clarisse was part of Armstrong Paradox robotic team as the engineer, creating the arm. She is now part of the MECHA First Tech Team as the lead engineer. She is also the 3rd speaker for Worlds Schools Debate. These activities have gained her the confidence in public speaking, leadership, and initiative. Clarisse will never forget the time where her group had to design and build a solar powered car using limited items and k'nex pieces. Although her group did not win due to the car's inability to move the longest and fastest because of the weight, it was a rewarding experience to design and collaborate within the group in creating such an amazing car. Clarisse believes it is not about the award or recognition in activities but, the experience and lessons being learned is the most fundamental. To all the classes she takes, her STEM classes are always her favorite classes. In the fall of 2021, Clarisse dreams to attend Georgia Institute of Technology majoring in Mechanical Engineering. In the future, she would love to work closes with Raytheon in aerospace and defense innovations.

Paola Gallegos
Harmony School of Innovation - Katy

Paola is a senior at Harmony School of Innovation-Katy. She is currently participating in this year's competition of CyberPatriot. Besides CyberPatriot, Paola is currently Captain of her First Tech Challenge team, Royal Robotics #9840. Throughout her high school career, she has created and programmed several things. She built a small robot that was programmed with a Raspberry Pi. To build the robot, she used a trashcan and used Vex motors to power the body. She controlled the robot using a Wii controller. Last year, she also completed another project in which she used muscle sensors to play a computer game by flexing. The muscle sensors were based on electromyography. She was also able to present this project to her local newspaper and have her picture on an article. She hopes on majoring in Cyber Security and in Computer Science when she goes to college.

Daphne Han
Kingwood High School

Daphne is currently a junior at Kingwood High School. Most recently, Daphne and three other high school and college students conducted research on the effects of varying subgroup vaccination rates at the risk of herd immunity deterioration under the guidance of a Dr. Alexander White. They collected conscientious vaccination rates for several diseases from the last several years from each school across the state of Texas and then ran over 100 simulations for each school, using the concept of stochastic block modeling, in order to model the disease network and the various infection rates. They then analyzed the various simulations and applied the results to other states in America with concerningly low vaccination rates in order to predict the herd immunity threshold within those states so that less people will be susceptible to infection of preventable diseases. As someone who cares about her school and community, she is also involved in numerous clubs, most of which she updates and maintains the club websites using HTML and CSS to improve accessibility and user friendliness. She is currently working on starting an event at her school based off of the concept of TEDxTalks in order to increase open minded discussion and to pop the bubble-like mindset within her community.

National Honorable Mention

NCWIT
Aspirations in
COMPUTING

Macy Huang
Carnegie Vanguard High School

Vaidehi Joshi
Clements High School

NCWIT
Aspirations in
COMPUTING

Divya Kalanee
Harmony School Of Science - Houston High

Divya is a current high school senior attending Harmony School of Innovation Sugar Land. She coded an artificial intelligence program using machine learning algorithms which classified tweets during hurricanes as "helpful" and "not helpful", in order for the potential implementation to help hurricane victims. She was also selected for and participated in the NASA High school Aerospace Scholars Program where she spent a week on-site planning a Mission to Mars. In the future, she aspires to research more into the field of artificial intelligence and also wishes to analyze data using computer science in order to apply it to other fields. She will be attending college the coming fall and also wishes to earn a PhD in computer science in the future. She hopes to receive research experience from college and the ability to apply artificial intelligence and computer science to other fields in order to innovate technology and solve problems plaguing the world.

NCWIT
Aspirations in
COMPUTING

Lochana Kalyanaraman
Young Women's College Preparatory Academy

Lochana is in 11th grade at Young Women's College Preparatory Academy. She served as the vice president for National Junior Honor Society for the 2017-2018 academic year. She presented her digital version of pong created in 2017 summer for Houston Prep at the awards ceremony, which she programmed using Java. Furthermore, Lochana has created programs in Java and Python languages as well as Arduino. She has been selected to participate in Houston Prep, Geo Force, and Explore Energy Summer Institute. Through these opportunities, Lochana has been exposed to the wonders of Computer Science and Geology and has developed a true passion to study these fields as she furthers her education. In addition, she also participated in the Science and Engineering Fair of Houston for the last two years and was introduced to data analytics using Tableau. These projects included analyzing two data sets of oil and gas reserves and volcanoes. In doing so, she opened her eyes to another amazing and fascinating field that enhances the computer science skills she endorses with the guidance and support of her father. Her goal is to work hard and become a successful woman. Lochana wants to pursue a career as a computer scientist and geologist where she can use her skills to create software and programs to display and analyze her findings. Further, Lochana would also like to dive into data analytics and incorporate this into her career. She hopes to attend the University of Texas at Austin or Vanderbilt University to study Computer Science, Geology and Data Science.. Moreover, Lochana would like to learn more about the world and find her place. She would like to go on expeditions and use her computing skills to analyze and show her work. Her greatest love is her family, whom she is grateful for each and every day. They have shaped her in many ways to become the person she is today. She cherishes and enjoys her journey with her family and looks forward to seeing what the future holds in her path to success.

Aidyn Lacks
William B Travis High School

Aidyn's greatest technical accomplishment is establishing a Girls Who Code Club at Travis High School. She plans to work in Cyber Security or Software Product Development. Aidyn has set her sites on attending the Massachusetts Institute of Technology. Aidyn also enjoys participating in Cyber Security challenges and competitions to better prepare for her future.

NCWIT
Aspirations in
COMPUTING

Elizabeth Landin
San Augustine High School

Elizabeth is currently a senior at San Augustine High school and will attend Texas A&M in the fall to major in Psychology with a minor in Journalism. After college, she plans to be a Psychologist for immigrant families and children. She is currently learning about HTML and CSS, which are very interesting topics to her. Elizabeth is part of the All-State Journalism Staff, Student Technology Crew, Student Council, Interact Club, National Honor Society and is a Student Webmaster and Social Media Specialist in her school district. She enjoys creating content for her community and school. Her hobbies include photography, dance, soccer and volunteering.

National Honorable Mention

NCWIT
Aspirations in
COMPUTING

Katherine Larina
Friendswood High School

Katherine Larina first became exposed to computer science in the summer before 9th grade. She then proceeded to take computer science classes to increase experience in the various branches. She participated in the CyberPatriot competition and is currently doing a Robotics competition. Outside of the STEM activities, she has also got a finalist ribbon in the rodeo livestock show and participated in the celebrating art contest.

Katherine Larina is planning to major in either computer science or physics. She plans to explore complex systems and problem-solving those systems.

Maria Larina
Friendswood High School

Maria (Masha) is a senior at Friendswood High School. She has engaged in active competition throughout high school, a competitor with the UIL Mathematics, UIL Ready Writing, Computer Science, CyberPatriot, Robotics, and SkillsUSA teams. She first branched out into real-world application of her technical skills at a Biomedical Optics Laboratory at the University of Houston, preparing optical phantoms, imaging embryonic development in research models, and analyzing images of blood vessels with ImageJ. This past summer, as an intern at the University of Houston Department of Electrical and Computer Engineering, she did extensive research and Python coding to develop a program that fits the Paxinos rat atlas to user-acquired brain scans and finds cell concentrations in brain parcels. Masha recently undertook a large independent project developing an interface that encrypts and decrypts strings and specific file types employing a series of known ciphers and various self-developed cryptographic techniques. In achieving this, she has spent countless hours teaching herself HTML, PHP, and JavaScript. Masha also spends time after school volunteering for the Friendswood Public Library, and she has a part-time job tutoring middle-school kids in mathematics. Once she has graduated from high school, Masha hopes to contribute to the scientific biomedical society in developing new approaches to applications of OCT (optical coherence tomography) systems. She intends to double major in computer science and neuroscience.

National Winner

NCWIT
Aspirations in
COMPUTING

Vivian Le
Harmony School of Innovation - Katy

Vivian has been a part of FIRST Robotics League for 4 years, designing and programming robots and winning four championships. She has helped build and program a prototype of a device as a replacement to service dogs used to helped the visually impaired maneuver around. She is an avid member of her school community and partakes in as many engineering and computer classes as she can. She plans to strive for a career in robotics engineering and would like to major in engineering and computer science at Georgia Tech. In her free time, Vivian plays the violin and likes to do origami.

NCWIT
Aspirations in
COMPUTING

Lesley Lopez
Young Women's College Preparatory Academy

Lesley Lopez is a proud leader of the all female robotics team, Robois. Lesley is a part of the Fundraising Committee for her graduating class, a member of the cross-country team , and is head of the Blood Drive Committee as well as the Senior Signing Day Committee. She has participated in the Verizon app challenge, Technovation App Challenge, and the Solid Waste Recycle Bin Art Contest. Her hobbies include drawing, writing, and programming. She has a volunteer summer job at the Harris County Public Library. Lesley's favorite STEM class is Computer Programming, and her favorite project was building a wind turbine out of sticks and index cards for the Rice D.R.E.A.M. Competition in Computer Programming. Lesley's plan for college is to attend the University of Houston and major in Industrial Engineering.

NCWIT
Aspirations in
COMPUTING

Amanda Macha
Needville H S

Risa Maida
Westside High School

National Honorable Mention

Hailey McAndrew
Ridge Point H S

Hailey is a student in STEM who plans to attend college in the field of bioinformatics/computational biology. She seeks to contribute to technology through projects in data analytics and statistical analysis as well as manipulation of big data through creative problem solving. She learns all she can to further her knowledge of the technology world and hone her computational abilities. She has so far coded programs in Java based on teacher-issued prompts, developed an app with a team to solve a problem in the community, and seeks to expand her knowledge-base and experience through practical implementation in the classroom.

NCWIT
Aspirations in
COMPUTING

Martha Moreno
Westchester Academy For International Studies

Martha is a sophomore at Westchester Academy. She aspires to one day achieve her goals and become a surgeon. Martha's favorite subjects are Biology and Math, she hopes to incorporate robotics into her future career as well. Martha wants to continue to pursue her studies at the University of Texas in Austin and continue her studies at Baylor College of Medicine.

Katherine Ochoa
George I. Sanchez Charter School - North

Katherine is an exemplary student, along with being determined and a hard working person. During the summer of 2019 she attended a program called Houston PREP dealing with Mathematic, Science, and Computer Science fields. She was awarded the Top Class Student during her six weeks at PREP. After high school she plans to attend college and base her career and study in the STEM branch. Working in new and alternative ways to produce energy is a topic she is very interested on and would aspire to work on in the future.

National Honorable Mention

**NCWIT
Aspirations in
COMPUTING**

Anisha Parsan
Clements High School

Anisha is a passionate freshman at Clements High School, in Sugar Land, Texas. She has a strong drive to keep learning, and she loves to solve problems to everyday issues. She has placed 1st in her category for 3 consecutive years at the Science and Engineering fair of Houston, due to her dedication and commitment. In 2017-18, Anisha designed and developed "Go with the flow - Flood prediction and warning system" using Python programming. She was invited to present her research to the Harris County Flood Control District in Houston and share her findings with the team developing a similar solution. This project also earned Anisha a place amongst the top 300 Broadcom projects in the nation. In 2019, Anisha developed a posture assistant "Back Seat Driver" to proactively help automobile drivers maintain correct posture and good health. For this, she learned how to use Arduino programming, and expanded her knowledge on circuitry. This project won first place in Computer Science category and 5 special awards at the Science and Engineering Fair, Houston. Anisha also has a strong passion for biology, and would love to combine biology and computer science in her future work. This summer, she spent weeks at UCSD in college level courses where she learned about bioinformatics, computational biology, and programing in R. She is excited to apply this newly gained knowledge to her endeavors this year!

Norah Rami
Clements High School

Norah is sophomore at Clements High School where she is an officer of their Girl's in Computing club. She is a Technovation 2018 Semifinalist as well as a Congressional App Challenge Winner. Norah is the co-founder of See and Say, a human-trafficking report platform that has been featured by Duke TIP and Wonder Women Tech. Norah also founded the first Texas Chapter of CoderGals, a program to teach young girls about coding. She hopes to continue teaching about coding and wants to work in the UN for education reform.

National Honorable Mention

NCWIT
Aspirations in COMPUTING
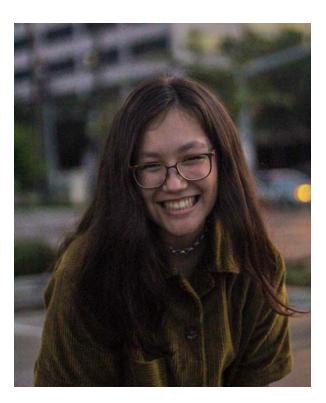
Arizleth Ramirez
Milby High School

Anya Robinson
Klein Cain High School

Anya is a diligent and high-achieving senior at Klein Cain High School in Houston, Texas. Her interest in computer science sparked upon entering high school. She discovered her love for coding and technology through her computer science classes and clubs. Anya helped start a Coding Club, Hack Club, and National Computer Science Honor Society at her high school to encourage other students to further their interest in computer science and programming in general. Anya notices that as our world is becoming more advanced, it's important for younger generations to have a foundation of programming; therefore, she volunteers at local elementary schools every week to educate children through basic programs like Scratch and Jeroo. She is particularly proud of her most recent website she made for an oil-technology company. Using JavaScript, HTML, and CSS, she created an office-room locator that allows visitors to search for an employee's name, whom the location of their office will become highlighted. Additionally, she serves as the Director of Sponsorships and contacts companies (including Microsoft, Major League Hacking, and Google) to encourage them to sponsor the only high-school hackathon in Houston-- KleinHacks. Another passion of Anya's is health science and medicine. As her school's HOSA: Future Health Professionals President for the second year in a row, Anya assists members in learning about current health topics, engaging in community service, and exploring careers in medicine. She is a two-time International Top 6 Finalist in a HOSA medical writing event. As a member of her school's competitive writing team, she is a two-time regional finalist for Scholastic Writing. In her spare time, Anya enjoys playing piano for the elderly at nursing homes and playing basketball for her school. In fact, she is currently working on a website for her school's Girls' Basketball team. She plans on pursuing her STEM interests in college as a Computer Science major with an emphasis in Biomedical Computation.

NCWIT
Aspirations in
COMPUTING

Wendy Rossi
Duchesne Academy Of The Sacred Heart

Anita Shiva
Lawrence E Elkins High School

Anita Shiva is a senior at Elkins High School. At School, Anita is a member of the National Honors Society, MuAlphaTheta, National English Honor Society, Film Club, and Junior Achievement. She was a member of Rep. Pete Olson's youth advisory council and currently serves in Missouri City Mayor's Youth Council. Anita enjoys volunteering in the Houston area hospitals and has over 120 volunteer hours to her credit. Anita has attended summer camps at Texas A&M and The Universtity of Texas, Austin to further enhance her programming skills. Anita thanks her teachers for helping her to excel in academics and is focused on pursuing a career in STEM. She plans to major in Computer Science in college. When Anita is not studying, she enjoys playing with her dog, Humphrey, and reading novels which are mostly mystery, thriller and scifi.
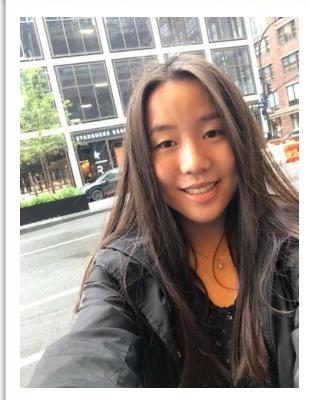
National Honorable Mention

NCWIT
Aspirations in
COMPUTING

Charlotte Stinson
Stratford High School

Yunuo Sun
Memorial Senior High School

I aspire to study engineering in college, particularly chemical engineering or electrical engineering. I hope to spend my life creating objects that are purposeful and beneficial to our society through a career in engineering.

NCWIT
Aspirations in
COMPUTING

Vanessa Truong
Dulles High School

Sofia Varner
Duchesne Academy Of The Sacred Heart

Sofia is a senior in high school who aspires to be an engineer! She is the team captain of the only all-girls FIRST Robotics Competition team in Houston, Iron Plaid, and does an IT internship at her school where she assists students and faculty with hardware and software repairs. Although she has experience with many engineering disciplines, she has yet to decide which one to major in but is excited to study at Northeastern University this fall to further explore different areas.

NCWIT
Aspirations in
COMPUTING

Grace Wang
Bellaire High School

Grace is currently a senior at Bellaire High School. She is involved in clubs such as Girls Who Code and Women in STEM. Grace enjoys playing tennis is is the team captain of her school's varsity tennis team. She also enjoys volunteering at the Houston Museum of Natural Science as a museum docent. Grace plans to continue her education in computer science as a Turing Scholar at the University of Texas at Austin.

National Honorable Mention

NCWIT
Aspirations in
COMPUTING

Maggie Wong
Westside High School

Eman Zaheer
Ridge Point High School

Eman is a dedicated and hard-working student who aspires to advance her knowledge in computing and technology. She has been an active member of her school's robotics team for the third year now, is a member of her high school's computer science team and is also working on an app for the Technovation challenge. In the future, she plans on attending college to study artificial intelligence and machine learning to advance the technological community.
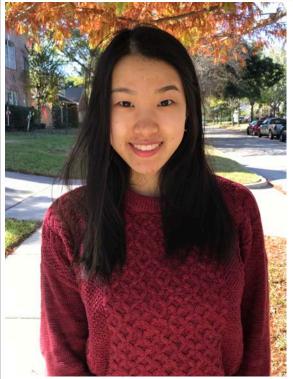
NCWIT
Aspirations in
COMPUTING

Sarah Zheng
Dulles High School

Sarah started working with Java in 9th grade. She has made small programs, most of them being calculators of some sort. She has also made simple trivia games using Boolean operators and if else statements. In the future, she hopes to go to college and obtain a degree to work in developing AI.

Annie Zhu
Bellaire High School

Annie enjoys participating in computer science competitions and has advanced to the Silver level in the USACO competition. She is also experienced in video editing having produced multiple tutorials and educational skits. Her newest projects include creating apps including one called Fresh Hub that aims to end food deserts and reduce food waste simultaneously by redistributing food that would be wasted to communities that lack grocery stores.
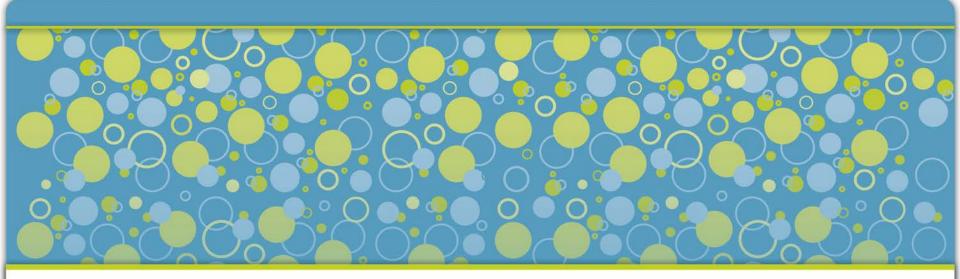
National Honorable Mention

NCWIT
Aspirations in
COMPUTING

Shirley Zhu
Bellaire High School

Shirley Zhu, a junior at Bellaire High School in Texas, noticed that 1.3 billion pounds of food is wasted every year, yet one fifth of the Houston population is food insecure. So, she founded Fresh Hub, an organization that rescues unsold fruits, vegetables, and bread that would have otherwise been thrown away, and redistributes the food to residents of Houston food deserts. Over fourteen events, Fresh Hub has rescued 8,500 lbs of food and has served over 1,100 clients in Sunnyside and Kashmere.

National Winner

NCWIT
Aspirations in
COMPUTING

Educator Awards

Ian MacIntyre
William B. Travis High School

Ian MacIntyre has been teaching physical science for 15 years, and moved into CS education full time last year. Alongside two amazing educators, he helped launch FBISD's Coding Club ~10 years ago. He sees building relationships among students, community centers, and nonprofits to be the key to long term success. There are currently ~100 students in the Girls Who Code and Technovation programs, building apps and working to solve legitimate problems in their community! Best of all, the girls have taken their skills into CS classes, building upon their abilities and amplifying their voices through technology!

Educator Honorable Mention

NCWIT
Aspirations in
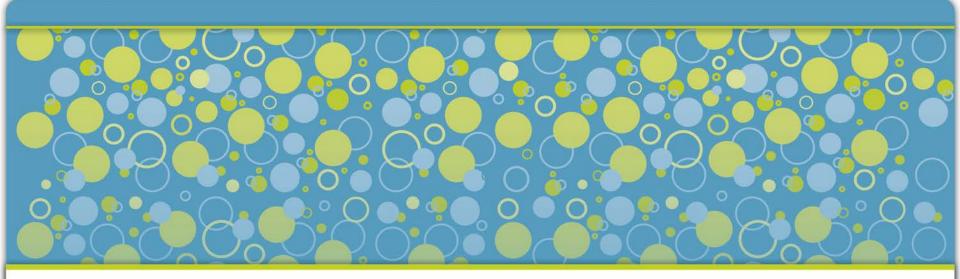COMPUTING

Annette Walter
Dulles High School

This is my sixteenth year teaching Computer Science at Friendswood High School. Prior to coming to FHS, I taught junior and high school students within a private school for five years. Before teaching children, I spent about 20 years in the oil, gas, chemical and computer industries as a project manager/programmer/analyst/software architect/computer trainer. I have an MBA with a concentration in Management Information Systems (MIS) from the University of Houston and an MS in Software Engineering from UHCL. Not only do I love computer languages, I have a passion for foreign languages. I have a BA in cultural linguistics with an emphasis in the romance languages: French, Spanish, Italian as well as a minor in Mathematics.

After working with several high school interns in industry, I was surprised that computer science was not being offered in many high schools in the Houston area. I decided it was important that I needed to teach and start a computer science program in high schools since I felt that it would be extremely important for students to be exposed to problem solving, detailed analysis and programming through computer science. I took this step and haven't looked back. When I started my teaching career at a small private school, computer science was non-existent. I managed to put together classes for junior high as well as the high school. When I started at Friendswood HS, a public school, the computer science department was very limited. I put together a plan where I recommended and implemented AP CS A , AP CS AB (before the College Board nixed it), pre-AP CS I, Intro to Computer Science, AP Computer Science Principles. Last year, I introduced Principles of Cyber-Security. The females that I have had in class are outstanding and most of them are studying Computer Science or are in the tech industries working as software engineers. It is important to me to recruit females into my classroom in order to diversify my classes.
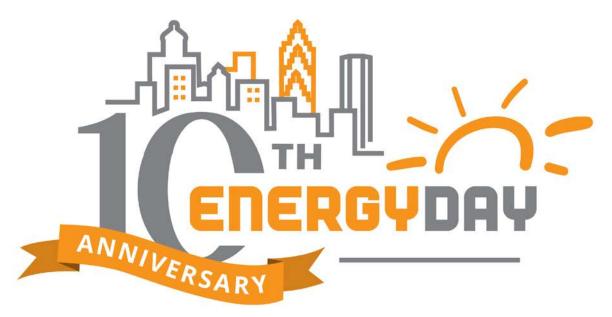
Educator Winner

NCWIT
Aspirations in
COMPUTING

National Winners Presentation

Energy Day Aspirations in Computing Awards
(cash prize)

Paige Jamail Barnes
Director of Education Outreach
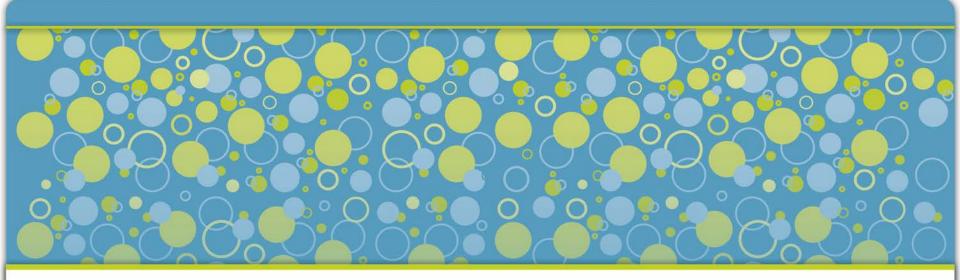*Consumer Energy Education Foundation*

Energy Day Academic Program

2020 Energy Day K-12 Media Contest
Teachers and Students Win Cash Awards Up to $300!
Submission Deadline April 15, 2020

Choose one or both
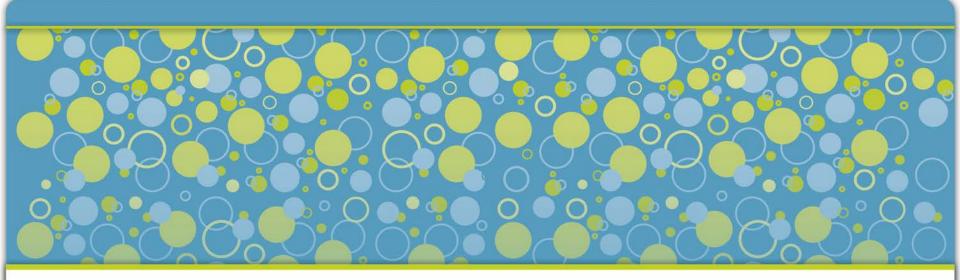
PRODUCE A VIDEO

DESIGN A MASCOT

We're super excited about this year's Energy Day Media contest! For our 10th anniversary, we're going big. Think "The Masked Singer" and all the other fun competition shows you see on TV. Combine that creativity with STEAM to win big! See more details on our website.

Closing Remarks by:

Mrs. Sangeeta Gad

Group Photos of Award Recipients

Many thanks to our committee members:

Sangeeta Gad, University of Houston – Downtown

John Greiner, Rice University

Karen Jean North, Retired Computer Science Teacher

UHD Volunteers