

2021



ZONTA
INTERNATIONAL

WOMEN IN TECHNOLOGY SCHOLARSHIP

Encouraging women to pursue education, career opportunities and leadership roles in technology



To create a world in which men and women have equal opportunities, women need to have an active role in technology and technological developments. The Zonta International Women in Technology Scholarship aims to encourage women to pursue education, career opportunities and leadership roles in technology.

As a pilot program, the Women in Technology Scholarship was offered for the first time in 2019 and then again in 2021. Zonta International awarded 30 district/region scholarships of US\$2,000 each and six international scholarships of US\$8,000 each in 2019, and **20 international scholarships of US\$8,000** in 2021. Read on to learn more about the 2021 international scholars.



2021 Women in Technology Scholar

Amani Abusafia



Citizenship: Palestine

Pursuing doctorate in computer science at the University of Sydney, Australia

Holds master's and bachelor's degrees in computer science, University of Sharjah, United Arab Emirates

Amani Abusafia is pursuing a doctorate to become a leading researcher in the field of computer science who will push for a gender-equal environment. She is working in the pioneering field of green Internet of Things (IoT) wireless energy sharing services in smart cities and her research expands the sharing economy by establishing a new eco-friendly market for wireless energy sharing. Her goal is to push the boundaries by leveraging the service paradigm to solve the intricate and unaddressed challenges in the emerging technologies of wireless energy sharing/charging.

Amani has received the Postgraduate Research Scholarship in the Internet of Things Service Management from the University of Sydney, the Grace Hopper Celebration Student Scholarship and the IEEE Women in Service Computing Premier Scholarship and a master's scholarship from the University of Sharjah.

Before starting her doctorate program, Amani worked as a lecturer at the Department of Computer Science at the University of Sharjah. She was also a research assistant in the Data Mining and Multimedia Research Group at the University of Sharjah. Her research interests include wireless sensor networks, data mining, service computing and distributed systems.



2021 Women in Technology Scholar

Japnit Ahuja



Citizenship: India

Pursuing bachelor's degree in computer science at the University of Ontario Institute of Technology, Canada

Japnit Ahuja is entering her third year as a computer science undergraduate student with a passion to teach coding to underprivileged girls through her nonprofit organization, The Girl Code. She is the only international recipient of the Global Leadership Award from her university worth CA\$72,000 and has maintained a 4.3 GPA.

Through The Girl Code, which conducts free coding workshops for underprivileged kids—focusing on girls—in India, Japnit has taught more than 2,000 girls how to code in native Indian languages. To reach remote rural areas during the COVID-19 pandemic, she started delivering her free workshops online and made them mobile-friendly for girls who did not have access to computers.

Japnit has a solid background in machine learning research and aspires to lead changes in this data-driven world through her research work in the future. She hopes to excel in her field and inspire the next generation of female computer scientists who would take the IT world by storm.



2021 Women in Technology Scholar

Balsam Alkouz



Citizenship: Jordan

Pursuing doctorate in computer science at the University of Sydney, Australia

Holds master's degree in computer science and bachelor's degree in IT multimedia, University of Sharjah, United Arab Emirates

Balsam Alkouz is a doctorate student at the Sensors, Cloud, and Services Lab at the University of Sydney, where she is studying swarm-based drone delivery services. Facilitating drone delivery services in cities is hindered by flight regulations that only allow the use of small drones for safety reasons. The delivery of multiple/heavier packages is constrained due to such regulations.

Balsam worked as a research assistant in the Data Mining and Multimedia Research Group at the University of Sharjah, where her research focused on detecting and predicting events, like influenza and traffic, from social network sites using Arabic and English posts. She is currently a product lead at the Google Developer Student Club at the University of Sydney and was previously an organizer at the Google Developers Group at the University of Sharjah and a Women Techmakers ambassador.



2021 Women in Technology Scholar

Carolyn Brandt



Citizenship: Germany

Pursuing doctorate in software engineering at Delft University of Technology, Netherlands

Holds master's degree in software engineering, University of Augsburg, Technical University of Munich, Ludwigs-Maximilians-University Munich, Germany; bachelor's degree in computer science, Technical University of Munich

Carolyn Brandt is a doctorate student at the Software Engineering Research Group of the Delft University of Technology, where her research focuses on the interaction of software developers with automated tools that are designed to support their work. Specifically, she looks at the automatic generation of developer tests, small programs that developers use to check the correctness of their code. Her goal is to embed the developers' expertise into automatic test generation tools to create test cases that the developers can directly use to improve their test suites and the quality of their software.

Carolyn played an important role in bringing the 2020 and 2021 editions of the flagship International Conference on Software Engineering online. She also served as publicity chair for VISSOFT 2021 and ECOOP 2022 and was invited as a reviewer for several prestigious journals. Carolyn's goal is to become a university professor, inspiring future generations of software engineers to design reliable, ethical and high-quality software, and improving the everyday work of software developers through excellent evidence-driven research.



2021 Women in Technology Scholar

Irene Cannistraci



Citizenship: Italy

Pursuing doctorate in computer science, Sapienza University of Rome, Italy

Holds master's and bachelor's degrees in computer science, Sapienza University of Rome

Passionate about research and how artificial intelligence applies to health care, Irene Cannistraci is pursuing her doctorate in computer science at the Sapienza University of Rome, where she is researching the study and development of new deep learning solutions for the health care field. She is currently developing a model that physicians can use to predict and prevent cardiovascular diseases in type 2 diabetes patients, which could prevent many fatalities. She is also working on a methodology to test the robustness of trading algorithms to avoid people losing money.

Before pursuing her master's degree, Irene worked as a software developer engineer for a multinational IT company, which allowed her to improve her technical skills by learning new technologies and programming languages. She also learned to be more patient, collaborate in large groups and work independently to improve her self-esteem.

Irene is currently working as a tutor and role model with the nonprofit organization, *Fondazione Mondo Digitale*, to convey her passion to other girls and teach them the basics of coding and how to fight gender inequality.



2021 Women in Technology Scholar

Wietske de Bondt



Citizenship: Netherlands

Pursuing bachelor's degree in applied mathematics and computer science and engineering, Eindhoven University of Technology, Netherlands

Wietske de Bondt is pursuing a double bachelor's and a one-year honors program in technology. She has competed in programming contests with her honors track and they reached the Northwestern Europe Regional Contest, a regional contest in the International Collegiate Programming Contest. One of just a handful of women in her program, Wietske believes she must make the technology field more approachable and attractive to women.

Wietske has always enjoyed school and learning and was proud to represent the Netherlands at the International Science Olympiads in Slovenia, where she experienced how education is organized in other countries. Her academic goal is to graduate cum laude.



2021 Women in Technology Scholar

Lindsey Deryckere



Citizenship: Belgium

Pursuing doctorate in computer science - online approximation algorithms, the University of Sydney, Australia

Holds bachelor's degree in computer science, Monash University, Australia

Lindsey Deryckere is passionate about addressing fundamental problems that impede progress in all walks of life. As part of her Ph.D. program, she is designing and analyzing online algorithms for time-sensitive optimization problems, which apply to health care, ridesharing and more. Before beginning the program, she completed three internships at Google, where she co-designed modeling software that lets Google Cloud Storage engineers anticipate customer demand within minutes instead of days. She also streamlined the process of communicating public transport information to users in the Google Maps app and developed a Google Maps-based tool that uses lattice-based noise functions to let non-technical game designers capture the natural beauty of irregular objects like forests in the Unity game engine.

Advocating for the power of education to break down barriers to opportunity, Lindsey volunteered at *Erikshjälpen* in Sweden to support children's right to education worldwide. Today, in addition to her responsibilities as a teaching assistant and tutor at the university, she invests her time in creating new teaching material to support teaching staff and engage students. She also mentors university students, especially those from underrepresented groups, and provides support for students and staff as a higher degree research student representative for the school of computer science. In 2020, she helped organize UniHack, Australia's largest student hackathon, to empower students to develop their ideas, regardless of their culture, education and background.



2021 Women in Technology Scholar

Healy Dwyer



Citizenship: USA

Pursuing master's in human-computer interaction, Carnegie Mellon University, USA

Holds bachelor's degree in information technology and social science, Florida State University, USA

Healy Dwyer is pursuing a master's degree, where she is focused on transportation and how both emerging and traditional forms of mobility can be more equitable. Throughout her graduate studies, she has conducted research involving a pilot deployment of personal delivery devices (PDDs)—also known as delivery robots—in Pittsburgh. In this study, she sought to better understand the problems and needs that may arise when these devices share sidewalks with pedestrians. Healy presented her initial findings on this work at the 2022 ACM/IEEE Conference on Human-Robot Interaction (HRI) at the HRI in Public Spaces workshop and to the city of Pittsburgh's steering committee on PDDs. She is also working on an eight-month-long capstone project with Honda's 99P Labs as a UX researcher studying the effects and potential of AI, robotics, telepresence and digital interactions in a transportation setting.

Before starting her degree, Healy worked for four years as a UX engineer and researcher in the transportation space, harnessing her background in both social science and information technology. In addition, she previously served as president of the Jacksonville Bicycle and Pedestrian Advisory Committee, founded a local advocacy organization called Bike Duval, and volunteered her mobile app development skills to Bike Lane Uprising, an app working to stop bicycle lane obstructions.

Following graduation, Healy plans to further her career as a researcher working to better understand the people at the heart of technology products. She will also continue to work with sustainable transportation advocacy and volunteer her time and skills to civic tech projects.



2021 Women in Technology Scholar

Laura Herman



Citizenship: USA

Pursuing doctorate in Internet/information studies, University of Oxford, England

Holds master's degree in social science of the Internet, University of Oxford; bachelor's degree in psychology, Princeton University, USA

Laura Herman is pursuing her doctorate at the University of Oxford's Internet Institute, a multi-disciplinary hub that examines the effect of technology on society. Surrounded by computer scientists, economists, political scientists and anthropologists, she leverages her background in cognitive neuropsychology to unpick the cognitive and behavioral effects of emerging technologies. Laura is also a senior research lead at Adobe, where she focuses on emerging creative technologies. Her team aims to inform the design of the next generation of creative systems, leveraging a particularly international and inclusive approach.

Laura's understanding of the creative process has been deepened by her own artistic practice. She has collaborated with Paris-based artists to develop and build "metaperceptual" head-mounted devices, exhibited at the Tate, that offer an embodied view of other beings' perceptual experiences. She also created data-driven, text-based art inspired by her synesthesia, a perceptual phenomenon in which stimulation of one sensory or cognitive pathway leads to involuntary experiences in a second sensory or cognitive pathway (i.e., hearing sounds and seeing a certain shape or pattern, or feeling an object and hearing a sound).

In previous research positions at Intel and Harvard University, Laura studied multisensory experiences in ubiquitous computing, computer vision and XR environments. Her master's thesis research took a longitudinal approach to examining viewers' perceptions of creativity on algorithmic content curation platforms and her undergraduate research investigated the perceptual expertise of artists and was awarded the George A. Miller Prize in Cognitive Science.



2021 Women in Technology Scholar

Kshitijaa Jaglan



Citizenship: India

Pursuing bachelor's degree in computer science and master's degree in computing and human sciences, International Institute of Information Technology, Hyderabad, India

Kshitijaa Jaglan is pursuing an integrated degree program in computer science and computing and human sciences. Having grown up in an environment filled with biases, discrimination and stereotypes, she wants to prevent those things from happening in automated decision processes. Kshitijaa's research focuses on eliminating irrelevant factors in automated decision-making—mainly using Casual ML, which works on a system of defined causes, making it easy to discard irrelevant ones like time of trial. After completing her degree, she plans to pursue a Ph.D. in a field at the intersection of machine learning and ethics.

Kshitijaa started her coding journey in high school primarily out of curiosity. The first app she created was to help her learn Japanese. She enjoys trying to find bugs in various tools and websites, as well as skating and waveboarding.



2021 Women in Technology Scholar

Rupal Jain



Citizenship: India

Pursuing master's in computer science, Indraprastha Institute of Information Technology (IIIT), Delhi, India

Holds bachelor's in computer science, IIIT Delhi

Rupal Jain is passionate about creating culturally responsive, inclusive and accessible technologies for different populations. As a dark-skinned, plus-size woman from an unstable home, she knows what it's like to be "othered" and has used her experience to fuel her success and uplift people like her.

Currently pursuing a master's in computer science, Rupal has experience with human-centered computing, user research and design, and has worked for companies such as Google, Adobe, Amazon, Mozilla and Stanford University. She launched the first-ever women in computing society at her university, which worked to build a sense of belonging and allyship among women.

Rupal plans to use her business, policy, design, advocacy and research skills to launch her dream project. Project Insaaf will normalize the diversity of the human condition under the pillars of respect and collaboration, and celebrate all the members of the neurodiverse community regardless of their diagnosis, race, religion, sexual orientation and gender.



2021 Women in Technology Scholar

Marlen Lorenz



Citizenship: Germany

Pursuing master's degree in computer science, Humboldt-University of Berlin, Germany

Holds bachelor's degree in artificial intelligence (AI), Radboud University Nijmegen, the Netherlands

Through her master's degree program in computer science with a specialization in human-computer interaction, Marlen Lorenz is expanding her skills to build inclusive and accessible technology for everyone, removing barriers for people of different ages, abilities and technical experience. She also works part-time as a user experience (UX) engineer for an AI consultancy, applying her experience in web development, UX and AI to create interfaces for AI applications. She works on traditional web front ends as well as innovative interfaces that go beyond the classical user interface.

Marlen has been involved in volunteer work since she was 11 years old and has been active with organizations such as UNICEF, Golden Z club and Rotaract. In recent years, her tech skills have become particularly valuable for her volunteer activities and she plans to continue to use her IT skills for social good. She strives to have a leadership position where she can shape a more diverse and inclusive working environment.



2021 Women in Technology Scholar

Kaylin Moss



Citizenship: USA

Pursuing bachelor's degree in computer science, Marist College, USA

Kaylin Moss recently finished her bachelor's in computer science with a software development concentration and minors in information technology and information systems. Though she never envisioned herself as a computer scientist, her perspective changed after excelling in a web design and development course in high school. Recognizing that many students are not exposed to computer science careers before college and continue to believe false ideas about the field, she grew inspired to change the narrative and engender diversity in computing as a software developer.

In 2019, Kaylin spoke about the steps for retaining historically underserved students in computer science while on a student panel at the Enterprise Computing Community conference and discussed the challenges women face as a panelist on a Women in Technology internship panel. Additionally, she has partnered with the Newburgh Early College High School program to expose Black and Hispanic students to technology careers.

Passionate about diversity within the technology industry, Kaylin founded the Marist College chapter of the National Society of Black Engineers, which promotes professional growth and builds an inclusive community for Black students and other underrepresented groups interested in science, technology, engineering and mathematics (STEM). Outside of her studies, she can be found tutoring her peers, modeling or writing poetry. She was the first student cover star of *Measure*, Marist's annual fashion magazine, and she won the inaugural Marist College poetry contest.



2021 Women in Technology Scholar

Chisom Okwor



Citizenship: Nigeria

Pursuing master's degree in computer science, Fisk University, USA

Chisom Okwor recently graduated with a bachelor's degree in computer science and started a role as a software engineer at Google. Growing up in Nigeria, she realized that the majority of people lacked access to essential resources for personal development and developed a passion for bridging the opportunity-access gap in African communities.

After her first year of college, Chisom worked as a technical instructor with the nonprofit Black Girls Code, introducing middle and high school girls of color to the world of programming. She has also worked as a software engineer intern with Google on the maps and Android teams for two consecutive summers and served as president of the computer science club on campus as well as the diversity coordinator for the Student Government Association. She was also involved in a cross-campus research program at Vanderbilt University centered on the ethical implications of human cyber-physical systems like autonomous drones, transactive energy, and connected and autonomous vehicles.

Chisom plans to pursue a master's degree in applied artificial intelligence and hopes to be at the forefront of new inventions with a substantial impact on societal progress. She strives to utilize her talent as a tool for positive change and her goal is to build cutting-edge technologies that will transform lives.



2021 Women in Technology Scholar

Jennie Patricoski



Citizenship: USA

Pursuing master's degree in information technology, Carnegie Mellon University, USA

Holds J.D., Technology Law, Notre Dame Law School, USA; bachelor's degree in political science and communications, University of California Santa Barbara (UCSB), USA

Jennie Patricoski is passionate about information security and dedicated to promoting both privacy rights and women's rights. She is pursuing her master's degree at Carnegie Mellon University while working as a security intelligence analyst at Tesla, where she performs network monitoring, conducts domain takedowns, provides legal research and supports the company's risk management and insider threat programs.

When Jennie was studying at UCSB, six people were killed and 14 injured in a misogynistic terror attack near campus. Jennie connected with community leaders and UCSB's student government and together, they spearheaded a crowdfunding campaign to reduce the number of guns in the area. She applied for law school based on her passion for human rights, but switched her focus after learning about how cybersecurity is a relevant national security concern for airlines.



2021 Women in Technology Scholar

Nancy Salem



Citizenship: Egypt and Netherlands

Pursuing doctorate in internet communication and social science, University of Oxford, England

Holds master's degree in development studies, SOAS University of London, England; master's degree in social science of the Internet, Oxford University; bachelor's degree in multimedia journalism and history, American University, Egypt

Nancy Salem's doctorate research critically assesses the potential of cultural institutions to provide space for public engagement with debates and developments in artificial intelligence (AI) and new technologies. Her work focuses on communicating the complex and global dynamics of AI production, design and use to a general audience. Increased understanding is critical for the public to be able to scrutinize how AI is already being used in multiple facets of our daily lives, while also being fundamental to building equitable and inclusive digital futures.

Before joining the Oxford Internet Institute, Nancy worked in the field of digital development in the Middle East and North Africa. Between 2016 and 2019, she worked as part of the Canadian International Development Research Center (IDRC)'s Data for Development network node in MENA, hosted at the Access to Knowledge for Development Centre. She was also a member of the Access Coalition of the EQUALS Global Partnership. Launched in 2016 by the International Telecommunication Union and four founding partners—GSMA, the International Trade Centre, the United Nations University and UN Women—EQUALS uses evidence-based research to close the global gender digital divide. Since then, Nancy has worked as an associate lecturer at the University of Arts London's Creative Computing Institute.

Nancy is pursuing a career in technology policy and development, placing the inclusion of women and marginalized communities at the center of her work. Her focus is on utilizing public spaces like museums to facilitate better science communication and create opportunities for participation in designing technologies.



2021 Women in Technology Scholar

Liliana Savage Pinto



Citizenship: Mexico

Pursuing master's degree in human computer interaction, University of Siegen, Germany

Holds bachelor's degree in industrial design, Instituto Tecnológico y de Estudios Superiores de Monterrey, Mexico

Liliana Savage Pinto is a researcher specializing in designing technology for governments and citizens in the Global South that lead to a better quality of life and social integration. She focuses on understanding how governments, non-governmental organizations and citizens collaborate to design innovative solutions that empower them to build their desired societies. Her master's program at the University of Siegen is enhancing her skills so she can become a factor of change in Mexico and Latin America.

Liliana recently collaborated with the United Nations Development Programme (UNDP) Accelerator Labs and the National Autonomous University of Mexico (UNAM) Civic Innovation Lab on a technological agenda for Mexico City's LUNAs, government centers that help women survivors of domestic violence. She implemented a dashboard that increases the speed and simplicity to register LUNA users, offers a friendlier visualization of the users' data for improved follow-up service, and allows a more efficient employee collaboration. She also developed a virtual assistant (chatbot) that allows users to report domestic violence.

Throughout her professional career, it has been crucial for Liliana to connect her work with citizens and institutions to have a real impact on society thus improving quality of life and social integration for vulnerable groups. She is proud to be a Latina woman involved in technology that is ethical, responsible and safe, ensuring that it positively impacts the lives of millions of citizens.



2021 Women in Technology Scholar

Allaine Tan



Citizenship: Philippines

Pursuing bachelor's degree in computer science, University of the Philippines Diliman, Philippines

Allaine Tan is committed to being at the forefront of technological innovation, despite the inherent struggles that come with being a woman in technology. Through her education, she hopes to bridge the privilege gap in education by creating for the minority, designing solutions with intricate attention to cultural issues and serving the underprivileged using technology.

In previous roles, Allaine worked as the director for external relations of the UP Center for Student Innovations, a service-oriented student organization that provides software solutions to entities both within and beyond the university. She also volunteers for Women in Technology, a nonprofit advocating for gender equality in tech. Through these organizations, she wishes to give her education in technology meaning—to combine her technical skills with the knowledge of local and international communities to create innovative solutions for equal opportunity beyond a small scale.

In technology, Allaine sees innovation and advancement. But what she loves most is its ability to democratize opportunity by liberating access to education and revolutionizing most, if not all, industries. In her pursuit to use technology as a medium to create an impact, she hopes that her story can demonstrate the power of passion and determination in achieving your goals regardless of your background.



2021 Women in Technology Scholar

Rubie Targema-Takema



Citizenship: Nigeria

Pursuing doctorate in software engineering, University of Portsmouth, England

Holds bachelor's degree in software engineering, University of Portsmouth

Rubie Targema-Takema is a software engineer, blogger and education advocate. In her doctorate program, she is working to develop a framework that supports the integration of learning technologies in education. She was inspired to do this after her final year project, which aimed to bridge the digital divide in less developed parts of the world by using low-cost technology to take information to rural areas where they could not afford to access needed information from the internet.

Rubie founded and runs FOCH Woman, a non-governmental organization that aims to raise a generation of value and purpose-driven young girls and women who are intentional about who they are and what they want. She also manages TechRubies, a social enterprise that aims to enlighten young girls and women on how to utilize technology to simplify their businesses, while also training people new to the technology space.

In her free time, Rubie writes, plays basketball or tennis, and finds herself at speaking engagements.



2021 Women in Technology Scholar

Minh Trinh



Citizenship: Germany

Pursuing doctorate in production engineering/robotics, RWTH Aachen University, Germany; bachelor's in computer science, University of Hagen, Germany

Holds master's degree in production engineering and bachelor's degree in mechanical engineering, RWTH Aachen University

Minh Trinh's research focuses on increasing the applicability of artificial intelligence (AI) for industrial robotics by integrating system knowledge into neural networks as well as using methods of explainable artificial intelligence. Her motivation is to reduce the reluctance of enterprises to apply AI-based solutions and thereby bridging the gap between research and industry.

Minh's master's thesis received the Hanns Voith Foundation Prize, which awards outstanding and innovative theses in the field of engineering, science and economics. During her studies, she worked for the Railway Mission, a charity offering help to people around the railway station, such as travelers, addicts or the homeless. Minh also volunteered in a youth center by helping children with learning difficulties.

Minh is dedicated to educating children about technology and science within the organization Engineers Without Borders. She wants to reach children from low-income households in particular. Furthermore, she is a member of Femtec.Alumnae e.V. (FTA), a network for highly qualified women in STEM fields. As part of the FTA, she encourages girls to enter the field of technology by offering hands-on workshops. She is also one of seven scholars of the Rhenisch Leadership College, which prepares young academics for leadership roles in economy, politics and society based on humanistic values.