VANESA AGUAY GUERRA

Global impact through technology and finance | (610)-478-5764 | vanesa.aguay@yale.edu | linkedin.com/in/vanesa-aguay/

EDUCATION

Yale University, *BS in Electrical Engineering & Computer Science,* New Haven, CT
May, 2028
Relevant Coursework: Data Structures and Programming Techniques; Data Exploration and Analysis
• Researcher, Yale Undergraduate Aerospace Association
• Treasurer, Latina Women at Yale
• Sophomore Class Council Representative, Yale College Council
• Website & Communications Manager for UCROSS, Yale School of the Environment
• Scholar; selected for Science, Technology, and Research program
• Mentor, Code Haven (Teaching coding classes at New Haven public high schools)
• Yale Alpine Ski Team & First-Year Outdoor Orientation Trips (FOOT) Leader

Wyomissing Area Jr/Sr, *High School Diploma,* Reading, PA
May, 2024
• Valedictorian and Class President (2020-2024)
• Researched photovoltaic material efficiency & began energy transition in district. Coded & founded inter-club collaboration platform

EXPERIENCE

Dwight Hall Socially Responsible Investment Fund, *Shareholder Engagement Member*, New Haven, CT
2024-Current
• Managing multi-step projects at oldest undergraduate-run SRI fund in country pursuing positive impacts by managing $200,000+.

Yale La Casa Latino Cultural Center, *Peer Liaison,* New Haven, CT
2024-Current
• 1/13 Peer Liaisons empowering Yale University students in a residential college to succeed academically/socially their first year.

uBridge, *Founder of 501(c)(3) international nonprofit*
2021-Current
• Empowered 120,000+ youth in 4 continents bridging the diversity gap in tech through interdisciplinary kits and workshops.
• Published 105 pg. book (named Amazon's #1 New Release) empowering Hispanic teens to think critically about AI.

NASA, *Mission Concepts Academy L'Space*
2025-Current
• Selected to work with a national team designing a NASA-aligned mission. Gained NX CAD, technical writing, programmatic skills.

Yale Helix, *Biotech Fellow*, New Haven, CT
2024-2025
• Validated API integration workflows with health startup FulcrumCare, analyzing dental software vendors to improve interoperability.

Jane Street, *Focus and Unboxed Fellow*, New York, NY
2024-2025
• Selected for small cohort twice for fully-funded technical workshops including SQL, heuristics, & immersion with firm teams.

AT&T, *Technology Academy*
2025
• Hands-on training in 5G, Azure cloud, SDN, secure coding, REST APIs, AI/ML, edge computing, and cybersecurity.

Governor's School for the Sciences at Carnegie Mellon, *Student & Alumni Outreach Coordinator,* Pittsburgh, PA
2023-Current
• Selected as 1/71 students for fully-funded residential program. Took college courses taught by CMU faculty including AI & Machine Learning, Discrete Mathematics, Computer Science, Cybersecurity. Explored Bridges-2 Supercomputer.

NOTABLE HONORS

• Hispanic Scholarship Fund Scholar, 2025 (<5% from 69k nationally); Youth Leadership Institute mentor-in-training, 2024
• **National AiC Winner**, *National Center for Women & Info Technology* and *Bank of America* (1/39 from 3,300), 2024
• National Gold Winner in Technology, *Hispanic Heritage Foundation* (1 of 10 gold winners from 30,000), 2024
• National Scholarship Recipient, *Society of Women Engineers* (selected as 1 of 37 college first-years across nation), 2024

PUBLICATIONS

"Governing Space Security: Analysis of the Potential for a Binding Multilateral Treaty" American Institute of Aeronautics & Astronautics
Hola Mundo: Inteligencia Artificial para Ninos
Amazon
"Investigating the Impacts of Environmental Factors on Neuron Function Using L. terrestris and C. elegans" Journal of the PGSS

SKILLS & INTERESTS

Computer Skills: Java, Python, HTML, C, CSS, SQL, R, Racket, ArcGIS, TensorFlow, Final Cut Pro, Adobe
Language Skills: Spanish (Native speaker)
Projects: Implemented hash maps, balanced KD-trees, and ASCII heatmaps in C for efficient simulation, geospatial analysis, and memory-safe data handling. Designed BFS, DFS, memoized recursion algorithms to solve shortest/longest path problems and optimize TSP-style geographic routing.