

Goal-driven passionate leader and ambitious student explores the convergence of technology and business throughout high school for graduation in 2024. Strong entrepreneurial spirit, open mind, and willingness to take on new challenges that require divergent thinking and perseverance.

## Experience

### **uBridge Founder**

2022 - Current

- Founded 501(c)(3) nonprofit on a mission to bridge the gender & diversity gap in STEM empowering Latino youth through 3 pillars: entrepreneurial thinking, interdisciplinary learning, and community building.
- Developed curriculum to empower 200+ innovators: runs weekly clubs, partners with 2+ libraries, and runs project-based STEM workshops exploring the convergence of 2 scientific fields at a time
- Helped run 400+ person Ecuadorian Empowerment event with local businesses.
- Leads executive leadership team of 8+ selected youth leaders in 4+ different countries.
- Synthesized knowledge gained in past experiences: inequity in education research & fundraising strategies (Yale Young Global Scholars program), Hispanic leadership development & financial insights (Hispanic Scholarship Foundation's Youth Leadership Institute), and the convergence of technology and business (Sorrelli Jewelry company internship).

### **Pennsylvania Governor School for the Sciences at Carnegie Mellon Bioengineering and Neurophysiology Researcher**

2023 - Current

- Performed and published 29-page neurophysiology research advised by Dr. Drill @PA Governor School for the Sciences (fully-funded, rigorous college-level program) on environmental effects on neurodegeneration using model organisms; presented to Carnegie Mellon faculty
- Developed laboratory techniques (PCR analysis, plasmid DNA isolation, electrophoresis gel procedures, experimental data analysis, selective markers) and detected GMOs in popular snacks in bioengineering lab advised by Dr. Doonan.
- Currently creates content connecting 2,800+ PGSS Alumni connected on various platforms (Instagram, LinkedIn, Facebook)

### **Penn State University & Sorrelli Jewelry at Kutztown Headquarters Tech Intern**

2022 - Current

- Assists teaching, creating C++ and java programs, for Penn State Berks CMPSC 201 and CMPSC 101 classes.
- Attended meetings, created digital content, helped organize communications using Google Teams within various departments at Sorrelli Jewelry internship at Kutztown HQ.

### **Society of Women Engineers National SWENext Influencer**

2022 - Current

- Completed the year-long virtual 2022 SWENext Academy with an international community.
- Developed agendas, gave educational talks about engineering, organized youth into workshop groups at 3+ meetings speaking to 100+ aspiring young women engineers internationally.
- Developed communications content to give engineering-based content and college access information to 1500+ people.
- Wrote for the SWE blog and international newsletter about being a Latina in STEM.

### **Luna Co. Founder**

2022 - Current

- A tech business formulated with a business plan, projected growth, target audience, marketing strategies to address sleep health with a circadian rhythm-measuring app and bluetooth, motion sensitive rug prototyped with 3D printing using CAD.
- Received 1st in a business pitch capstone competition to 6+ investors.

### **Emerging Entrepreneurs Academy, Alumni Association President & founding member**

2022 - Current

- Selected to be in 2022 inaugural class for intense 6 week, fully funded program for future business leaders at Riverfront Credit Union to develop financial knowledge and business strategy.
- Refined effective communication as founding member of growing Alumni Association to connect 50+ aspiring business leaders by public speaking, and hosting events.
- Helped grow the academy w/ business strategy and spoke in schools helping secure a partnership with Penn State Berks.

**Head of Tech & Education Outreach Committee**

- Developed effective writing skills to write 2 proclamations, one signed by Governor Shapiro and the other by Berks County Commissioners, to proclaim May 23rd as youth mental health awareness day.
- Created a collaborative environment, created digital petition, and streamlined productive tasks to lead 20+ meetings with the PA School Principals Association and Representative Kane, Schwank, and Nelson to author Senate Bill 866 introduced in session to address mental health excused days in PA schools.
- Spoke at the commissioner meeting about cultural disparities in youth mental health.
- Organized an advocacy day at the Capitol in Harrisburg for 100+ youth, spoke at the press conference, and met with legislators about youth mental health relating to education and cultural disparities.
- Sparked interest in biomedical AI-enabled neuroimaging to find psychiatric biomarkers to improve equitable diagnosis.

**Wyomissing Area High School | Reading, PA****Education****Sep 2020 - Expected Graduation June 2024**

- **Rank:** 1st | GPA: 5.45
- **Independent study:** AP Microeconomics course, Python Final Games and Apps course, CMU CS Academy
- **Class President (2022-2024)**
  - Coded html website to create a platform for inter-club collaboration and founded school-wide inter-club council.
  - Designed, managed finances, and distributed 440+ class shirts.
  - Created 40+ digital flyers and produced videos for 12+ clubs and 3+ websites for school organizations.
  - Reintroduced student-run recycling (500+lbs)
  - Opened Spanish Club membership to ESL students
  - Ran book drive partnering with a NGO donating 100+ books to youth in Peru
- **Student school board representative** (representing 650+ students bi-monthly)
- **Wyo HS Internships:** Honors chemistry teacher assistant (2023-2024); Communications intern (2022-2024)
- Varsity track and field (captain), Spanish Club (President), Sociedad Honoraria (President), Service Club (Vice-president), Mini-Thon (Head of Communications Committee), Math Club (Secretary), Model UN
- **Independent project:** engineered self-automated photovoltaic system, conducted research on solar panels material, and began the solar transition process at the Wyomissing School District {<https://tinyurl.com/3ctv5fjc>}

**Awards/Honors**

- National Center for Women & Info Technology (NCWIT) Greater Philadelphia Regional Winner, 2023
- Bank of America & NCWIT & National Honorable Mention, 2023
- Hispanic Scholarship Fund Scholar (& selected to attend fully funded Youth Leadership Institute), 2023
- Yale Young Global Scholar & Selected Speaker, 2023
- National Hispanic Recognition Program and AP Scholar w/ Distinction (CollegeBoard), 2023
- National Coca Cola Foundation Scholars Semifinalist, 2023
- Gold Presidential Volunteer Service Award, 2022
- Philadelphia Union League and Eastern Pennsylvania Youth Soccer Good Citizenship award, 2023
- National Recognition Bebras Computing Competition, 2021
- Hugh O'Brian Youth Leadership Foundation Alumni & Scholarship Semi-finalist, 2022
- Berks Rotary Student of the Month, 2023

**Links/Portfolios**

- **Linkedin:** [www.linkedin.com/in/vanesa-aguay-23403a243](https://www.linkedin.com/in/vanesa-aguay-23403a243)
- **uBridge:** [ubridges.org](https://ubridges.org)
- **Neurophys Research:** <https://tinyurl.com/29x874au>
- **YouTube Channel:** <https://tinyurl.com/4txrvhkf>
- **Advocacy News:** <https://tinyurl.com/y6uxcxxk>
- **Example coded website:** [wyostudents.com](https://wyostudents.com)

**Skills**

- Native Spanish Speaker
- Java, JavaScript Python, HTML, C++, CSS
- Bioengineering lab skills
- Experience with ArcGIS, TensorFlow, Final Cut Pro, VS Code IDE, Arduino, Spark, Matplotlib
- American Red Cross Lifeguard Certificate