

## Education

**Vanderbilt University** | Nashville, TN

**May 2025, anticipated**

Bachelor of Science, Computer Science & Applied Mathematics

GPA: 3.86

## Skills

**Personal Website** [viennap.github.io](https://viennap.github.io)

**Programming Languages:** Java, C++, Python, HTML/CSS/JavaScript

**Relevant Coursework:** Intermediate Software Design, Program Design and Data Structures, Discrete Structures, Digital Systems

## Professional & Leadership Experience

### Program Management & Marketing Intern @ Pure Mentorship

*December 2022 – present*

- Assist founder in overseeing project schedules and resource management to deliver marketing assets with an Agile methodology
- Devised strategic solutions for outreach with Gantt charts, Trello, and Google Analytics and communicate with a 14-person team
- Developed logistics handbooks, maintained website and digital content, and helped increase mentee interest by 10+ students

### IT Committee Board Intern @ Vanderbilt Student Volunteers for Science

*January 2023 – present*

- Collaborate with board members in Python GitHub environment to maintain a scheduler designed to match 200-300+ student volunteers with local underfunded middle and high schools for daily science lessons and community service events
- Working toward developing org. website from scratch using HTML, CSS, and JavaScript

### Developer @ Vanderbilt Data Science

*January 2023 – present*

- Collaborate with Vanderbilt Data Institute on the Ancient Artifacts repository, a project aimed at conducting micro-debitage analysis to classify artifacts from a Guatemalan stone knapping site by their dimensions and most likely locations of origin
- Learned the basic principles of ML and R to document a random forest classification module

### Cohort Advisor & Alumni Advisory Board Member @ Pioneer Academics

*November 2022 – present*

- Advise two six-scholar cohorts per academic season in navigating high-level STEM research and time management
- Coordinate with scholars, administration, and professors via Asana and the Schoology LMS to manage sessions
- Facilitate panels of 60+ current scholars on conducting research, college readiness, and building professional relationships

### Podcast Co-Host: *Hot Girl Tech*

*October 2022 – present*

- Co-host and co-creator of a biweekly podcast featuring conversations about our personal experiences as aspiring women-identifying engineers and discussions of computer science introductory topics
- Edit, produce, and release 15-30-minute episodes on [Spotify](#); reaches 20-30+ listeners per episode, peaked at 100+

### Vanderbilt Engineering Council Board: Incoming President of Public Relations

*October 2022 – present*

- 1 of 6 incoming members on the E-Council executive board, representing engineering student body of 1000+ students
- Plan 2-3 community events, lunch committees, and social weeks per semester, allocating budgets of \$800-1000 each

## Academic Projects & Research Experience

### Computer Vision Research Scholar @ Pioneer Academics

*July 2021 – September 2021*

- Conducted deep learning research for facial emotion recognition under Prof. Susan Fox of Macalester College
- Coded using Python and OpenCV libraries to test multi-layer network across four micro- and macro-expression datasets
- Achieved val. accuracy of 63%, improving from 60% by reducing overfitting and adjusting dropout rates
- Summarized findings in 20-page manuscript discussing human-machine interaction and expression recognition (see portfolio)

### Exploration of Criminal Justice & Ethics @ Inspirit AI: Criminal Justice

*August 2020 – November 2020*

- Studied deep learning algorithms for criminal relapse rate prediction through the COMPAS recidivism racial bias dataset
- Concluded that NNs trade interpretability for accuracy (67-74%), implying a persistent risk of human error in the legal system

### Research: Miniature Origami-Inspired Robotics for Biomedical Applications

*June 2020 – April 2021*

- Designed ingestible 2in. x 2in. mobile robot for the removal of inadvertently swallowed button batteries in stomach
- Modeled using Blender and SketchUp Layout and tested prototype in bodily environment synthesized from polymer mold
- 2nd award at Synopsys Sci. & Tech. Championship, recognized by San Jose Mayor and City Council for STEM achievements