# Vienna Parnell

San Jose, CA vienna.z.parnell@vanderbilt.edu https://www.linkedin.com/in/viennaparnell/ (669)-262-9506

**Education** 

Vanderbilt University | Nashville, TN

May 2026, anticipated

Bachelor of Science, Computer Science & Applied Mathematics

GPA: 4.0

# **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, advertising, and branding
- 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

### 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, admin., and prof. by completing reports, recording student performance, and scheduling 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 womenidentifying 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

- Plan 2-3 community events, lunch committees, and social weeks per semester, allocating budgets of \$800-1000 each
- Represent engineering student body of 1000+ undergraduates

### **Python Instructor @ Code Ignite**

October 2022 – December 2022

- Taught weekly 1-hour Python virtual classes of 5-6 students at West End Middle School in Nashville
- Lectured on fundamental topics, led programming demos, and coordinated with other instructors to encourage students to pursue computing in the future.

## **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

### **Additional Resources**

Personal Website: viennap.github.io Research Portfolio: tinyurl.com/vparnell