# Varun Madan

## EDUCATION

### Stanford University

Sept. 2022 – Jun. 2026

Bachelor of Science in Computer Science

GPA: 3.8

• Relevant Courses: Programming Abstractions (Python), Data Structures and Algorithms (C++), Computer Organization and Systems (C), Introduction to Probability for Computer Scientists (Python), Mathematical Foundations of Computing, Linear Algebra and Multivariable Calculus

#### EXPERIENCE

Data Science Intern

Jun. 2023 - Sept. 2023

Altai Capital

Newport Beach, CA

- Conducted research and data analysis in R on hundreds of recycling centers and their capacity/materials processed in four prominent Western countries (Germany, Canada, United Kingdom, and France) for the firm's CEO.
- Added existing plastic sortation data in Germany for each recycling center to my map that was then used to aid the company's investment in Digimarc's proprietary digital watermark-based sortation technology.

### Website Development Team Lead

Jun. 2023 – Sept. 2023

The Carbon Company

Remote/San Francisco, CA

- In charge of developing a <u>website</u> that reached 15,000 visitors for this climate tech startup. Built multiple landing pages, integrated with services such as Firebase, and constantly updated JavaScript/CSS to troubleshoot bugs.
- Created multiple email automations in Mailchimp using advanced conditional logic that is customized for members when they sign up and indicate how they want to get involved with the company's mission.

# Research & Development Engineering Intern SIMETRI

Jun. 2022 – Aug. 2022

Orlando, FL

- Developed and tested numerous augmented reality simulations with Unity in a modular medical environment to mimic healthcare simulations on the battlefield.
- Led a robust cost-benefit analysis of new scanning technologies by negotiating with manufacturers on behalf of the engineering department, which ultimately helped decrease excess company spending by over \$10,000.

# PROJECTS

Vintave | PyTorch, Python, React, SQL

Jan. 2023 – Sept. 2023

- Built a computer-vision-based authentication and quality assurance software to provide over 150 avid shoppers with high-quality used handbags from 10+ local shops that lack an online presence around the Bay Area.
- Accepted to the Stanford Design School's Launchpad 13 cohort as well as the Stanford Doerr School's Hacking for Climate and Sustainability, two of the most selective accelerator-based classes on campus.

### **BeemunityAI** | Python, TensorFlow, R, Keras, Scikit-learn

Aug. 2017 – Sept. 2022

- Developed a probiotic mixture treatment and a novel multiple linear regression model in collaboration with the University of Florida to optimize honeybee gut immunity against numerous external stressors.
- Awards/Honors: European Union Contest for Young Scientists Award Winner, 2-time Regeneron ISEF 1st Place Winner, Minor Planet Naming, National Science Talent Search Scholar, 5-time Florida Regional Grand Champion.

### LEADERSHIP AND VOLUNTEERING

- Founder/Lead of Google Developer Student Clubs @ Stanford: Developer group of 50 students on campus.
- Teaching Fellow for CS 105, Introduction to Computers: Stanford course for Title I High Schools nationally.
- Founder/CEO of Everyone Deserves STEM: Nonprofit providing scientific education to 1,500 children globally.

### TECHNICAL SKILLS

Languages: Python, JavaScript, C, C++, SQL, R, Java, HTML, CSS

Frameworks: React.js, React Native, Node.js, Express.js, Flask, PyTorch, WordPress

Developer Tools: Git, Google Cloud Platform, VS Code, Visual Studio, IntelliJ, Eclipse, Qt Creator

Libraries: NumPy, Matplotlib, Scikit-learn, pandas