Rakesh Pillai

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EDUCATION

Thomas Jefferson High School for Science and Technology
June, 2021

- 4.33/4.00 (Weighted GPA)
- 1570 SAT (800 Math, 770 English)
- Relevant Coursework: AP Calculus AB & BC, Multivariable Calculus and Matrix Algebra, AP Computer Science A, Parallel Computing, AP Physics C: Mechanics and Electricity and Magnetism

Virginia Tech
2025

- Calhoun Honors Discovery Scholar (Full Tuition, Academic Merit)
- 3.94 GPA
- Major in Computer Engineering with focus on Machine Learning
- Relevant Coursework: Differential Equations, Computational Engineering (C++), Circuits and Devices, Digital Systems

EXPERIENCE

CCI Battledrone Competition **Oct. 2021 – Dec. 2021**
Volunteer

- Created a competition for college and high school students across the nation
- Built autonomous drone navigation code in Python
- Gained experience with Linux
- Used 3D printing, soldering, and lab equipment to design the drone kits

Irys **Oct. 2021**
Hackathon Project for HackDuke

- Built a web app using Node.js and React
- Constructed a python script using preexisting libraries to track eye movement and determine when the user is distracted from the screen
- Connected the web app to CockroachDB to store collected data
- Won 3rd place in the Health and Wellness track @ HackDuke Code for Good

Pokécounter **Dec. 2021**
Personal Project

- Built a website using the Django framework @ www.pokecounter.net
- Improved CSS, Python, HTML, and JavaScript skills
- Implemented different algorithms and data structures

Slingshot **Jul. 2020 – Dec. 2020**
Machine Learning Intern

- Used the React Native framework to develop a cross-platform app to collect gesture pattern (swiping, tapping, etc.) data from users
- Learned how to work with React lifecycle methods
- Utilized Firebase platform to authenticate users and store data collected from users
- Analyzed data collected from app using Python and a K-Nearest-Neighbor algorithm

SKILLS & INTERESTS

- **Skills:** Java (proficient), Python (comfortable), HTML (comfortable), JS (comfortable), Verilog (comfortable).
- **Interests:** creating Python automation scripts; CTF competitions; digital signal processing;