Rakesh Pillai

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Experience

CCI Battledrone Competition

Oct. 2021 - Present

Volunteer

- creating a competition for college and high school students across the nation
- building autonomous drone navigation code in Python
- using 3D printing, soldering, and lab equipment to design the stadium for drones

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
- Learned Django fundamentals
- Improved CSS, Python, HTML, and JavaScript skill

Slingshot Jul. 2020 – Dec. 2020

Data Science Intern

- Used the React Native framework to develop a cross-platform app to collect gesture pattern (swiping, tapping, etc.) data from users
- 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

EDUCATION

Thomas Jefferson High School for Science and Technology June, 2021

- 4.33/4.00 (Weighted GPA)
- 1570 SAT (800 Math, 770 English)
- 2 years of Varsity Basketball, Vice-President of German Honor Society, Treasurer of Innovations and Concepts in Engineering Club, Team Captain of Rocketry Team
- 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
- electrical engineer for the RoboGrinder team (the team participates in the annual RoboMaster competition)

SKILLS & INTERESTS

- Skills: Java (proficient), Python (comfortable), HTML (comfortable), CSS (comfortable), and JS (comfortable)
- Interests: creating Python automation scripts; competing in capture the flag competitions; solving Rubik's cubes; hiking; snowboarding; playing basketball