Nikhil Polepalli

nikhil.s.polepalli@gmail.com • linkedin.com/in/nikhil-s-polepalli-87b584186/ • github.com/NSPOLE01 • https://www.nikhilpolepalli.com/

EDUCATION

Vanderbilt University | Nashville, TN Expected Graduation May 2024

Bachelors - Computer Science, Economics *Cumulative GPA: 3.85*

Coursework: Operating Systems, Artificial Intelligence, Cyber Security, Algorithms, Data Structures, Software Design, Discrete Mathematics, Digital Systems, Multivariable Calculus, Programming Languages, Software Engineering

SKILLS & TECHNICAL TOOLS

Languages: Java, Python, JavaScript, C++, HTML/CSS, GO, SQL

Technologies: Git, GitHub, AWS, Vercel, Docker, DynamoDB, Jenkins, Bogie, Django, Firebase, React, .NET, GoogleAuth

EXPERIENCE

Software Engineering Intern | Capital One *June 2023 - Aug 2023*

- Implemented a scalable AWS lambda function that decreased response times by 33% and efficiently processed, handled, and stored data on DynamoDB for easy API call access
- Developed and tested three separate API endpoints in GO with 90% code coverage to query DynamoDB
- Used Figma to prototype and React to fully build out user interface allowing users to easily filter through thousands of configurations and visualize each configuration difference
- Integrated back-end service with front-end service and deployed full-stack application to QA with Jenkins

Software Engineering Intern | Northrop Grumman *June 2022 - Aug 2022*

- Wrote a Python script to minimize data collection, data extraction, data analysis, and data staging times by automating several Python scripts to work in conjunction with one another
- Deployed script to production and eliminated all manual labor previously used in this data analysis process

Software Engineering Intern and Tutor | Digital Horizons LLC *July 2020 - Aug 2021*

- Optimized the company's technology stack on the back end to optimize run-time and more efficiently reach and help prospective students

PROJECTS

VandyPool

- Full stack rideshare and carpool web application to help Vanderbilt students save money on rides to the airport
- Prototyped, developed, and deployed React user interface and several API endpoints with the Django framework to retrieve passenger and driver information
- Designed SQL database schema to store all user information, flight information, and car information
- Integrated Jest and Playwright to customize unit and functional testing suite, achieving 90% code coverage

Credit Card Cash Back Optimizer

- Independently designed and deployed a full-stack web application using ReactJS, CSS, and Firebase
- Allows user to input and store the different credit cards they own to view the cash-back attained for each transaction
- Implemented GoogleAuth to authenticate user emails and streamline the log-in/registration process

Low-Cost Tachycardia Diagnostic Tool

- Developed using Arduino microcontrollers and Arduino IDE along with heart rate monitors and Bluetooth modules
- Python script reads user heart rate values and detects when there has been a significant fluctuation, a notification is then sent to the user, telling them to take it easy and monitor their activities
- Awarded INTEL excellence in computer science at the Kentucky State Science Fair in 2019