

Nikhil Polepalli

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EDUCATION

Vanderbilt University | Nashville, TN

Expected Graduation May 2024

B.A. - 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.

SKILLS & TECHNICAL TOOLS

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

Technologies: Git, GitHub, AWS, Vercel, Bootstrap, Docker, DynamoDB, Jenkins, Bogie

EXPERIENCE

Software Engineering Intern | Capital One

June 2023 - Aug 2023

- Implemented a scalable backend lambda function in GO that decreased response time by 50%, efficiently processed, handled and stored data on AWS DynamoDB for easy API call access
- Developed and tested three separate API's with 90% code coverage. API's use the lambda function to query the DynamoDB and return configurations to the frontend
- Built a user-interface using React that allows users to easily filter through configurations and visualize differences between several configurations
- Fully integrated back-end service with front-end service and deployed full-stack application to quality assurance

Software Engineering Intern | Northrop Grumman

June 2022 - Aug 2022

- Successfully developed and deployed an algorithm to minimize data collection, data extraction, data analysis and data staging times by automating several python scripts to work in conjunction with one another
- Worked in team of 10 using Scrum/Agile principles

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

Credit Card Cash Back Optimizer

- Independently designed, developed and deployed a full-stack web application developed using ReactJS, CSS, and GO
- Allows user to input and store the different credit cards they own along with their respective cash back values
- For each transaction, the application will show the user which card to use in order to maximize cash back

Note Manager

- Full stack web-application with dummy database and server that allows users to create, edit, store, and delete notes
- Developed and deployed 4 API endpoints, allowing the front-end to seamlessly call each endpoint to perform simple functions and redirect the user to different web pages based on the desired action

Low Cost Tachycardia Diagnostic Tool

- Developed using Arduino microcontrollers and Arduino IDE along with heart rate monitors and a bluetooth module
- 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 Kentucky State Science Fair in 2019