Krutarth Rao

(419) 871 1645 • raok@purdue.edu • raok.azurewebsites.net • raokrutarth
www.linkedin.com/in/raokrutarth

Education

Purdue University — **West Lafayette, IN, USA**
Bachelor of Science in Computer Science, Software Engineering and Security — *Graduation: May 2018*

Minor: Economics
GPA: 3.85/4.00

Relevant Skills and Interests

Go, C/C++, Python, Java, Backend, Docker, Scripting, Automation, Computer Networks, RESTful APIs, Data Science, Machine Learning, Natural Language Processing (NLP), Cloud Services (AWS, Azure, Salesforce), Blockchain (Hyperledger, Bitcoin), Security (Network Security, Data Privacy)

Work Experience

Software Engineer II — **Santa Clara, CA, USA**
Hewlett Packard Enterprise, Aruba — *May 2017 - Present*

Network Analytics Engine (NAE) team in campus and branch networking division. Developing on-device analytics system.

- Developed back-end service in Golang to monitor, aggregate and baseline high frequency time series data on network metrics.
- Led aggressive performance tuning investigation to deliver new products.
- Cut memory footprint from **1.4 GB to 200 MB** for execution on resource constrained products.
- Implemented event management modules for parallel processing of high frequency data.
- Delivered UI usability improvements for better data representation and customer experience using ReactJS.

Undergrad Research Assistant — **West Lafayette, IN, USA**
Purdue University — *May 2016 - May 2018*

Blockchain Network for Supply Chain with IBM Hyperledger. Worked with a team of graduate and undergraduate students led by Prof. Aniket Kate to develop prototypes for supply chain software for **Northrop Grumman** and the mobility division of **Ford Motor Company**.

- Designed transactions the align with use case specifications.
- Used Golang and REST APIs to implement Blockchain transaction logic.
- Automated testing to speed up development using Docker.

Projects

nae-benchmark (2019)
Set a new standard in organization for stress testing our services
Implemented, maintained and promoted developer tool within organization. Reduced stress testing time from 3 days to 6 hours. Used Prometheus, Grafana, Python, Go and Docker to replicate stress environments. Tool aided in reducing memory footprint by 200% in multiple services.

Fleet Energy Management (2018)
Time-series data management and data handling service served using containers
Implemented personal project using Python, Pandas, Flask, Docker and InfluxDB to provide a fault-tolerant REST service that stores and transforms time-series data for it's client. Uses Gunicorn to serve parallel requests.

MeetOver - Connecting Professionals on the fly (2018)
Developed Go backend for full-stack project that involved ReactJS, Firebase and NLP with word embeddings
Implemented RESTful backend with natural language processing for a team project to match users with profiles on our mobile app using the LinkedIn API.

Awards and Leadership

Undergraduate Research Award
Awarded outstanding undergraduate researcher award in the 2018 annual Purdue Computer Science Banquet

Recipient of Purdue Summer Stay Scholarship and Position in Cryptography Research Team
Scholarship for full tuition for summer classes to join the research team at Computer Science Department