Rajashekar Reddy Aluka

Email: raluka@asu.edu **Phone:** +1-6027363703 **Github:** aluka1994 **LinkedIn:** aluka1994

Education

Arizona State University, Tempe, Arizona *Jan 2020 - Dec 2021*

- Masters in Computer Science, GPA: 4.0/4
  Coursework: Cloud Computing, Data Processing at Scale, Natural Language Processing, Data Mining, Data Visualization, Algorithms, Statistical Machine Learning, Semantic Web Mining, Mobile Computing

International Institute of Information Technology, Hyderabad, India *Jul 2013 - May 2017*

- Bachelors in Computer Science and Engineering

Technical Skills

Languages: Python, go, C++, C, Java, JavaScript, PHP, Swift
Frameworks: FastAPI, Flask, Django, Celery, SKlearn, Keras, PyTorch, Reactjs, Vue.js, Nodejs
Databases & Tools: PostgreSQL, MYSQL, MongoDB, Elastic Search, Apache Pulsar, Apache Airflow, Apache Kafka, Apache Zookeeper, Redis, GraphDB, RabbitMQ
Cloud & Deployment : AWS, Google Cloud, Azure, Docker, Kubernetes, HelmCharts

Professional Experience

Nutanix Inc

Member of Technical Staff - 3 *Feb'22 - Present*

- Migrated the backend of the test case management system from Django to FastAPI, resulting in a significant 30% improvement in performance. This system is utilized by over 2000 developers and Engineering leaders daily to track their test performance of Nutanix products.
- Implemented various features and maintained build and test orchestration systems used by over 2000 developers.
- I led the team in conceptualizing, designing, and developing a knowledge bot using Llama and Rasa for the annual Nutanix Hackathon 2023, where our team was one of the winners.
- Participated in buddy program to support and help the interns.

Member of Technical Staff Intern *May'21 - Aug'21*

- Deployed the highly available streaming service Apache Pulsar to production using Kubernetes, enabling multiple micro-services to leverage its capabilities. Also designed and implemented a highly available service to produce and consume events using a raft to Apache Pulsar.
- **Technologies used are:** Python, go, FastAPI, Django, Bottle, Reactjs, Kubernetes, Docker, Helmcharts, Nutanix Karbon Cluster, Apache Pulsar, Apache Zookeeper, MongoDB.

ASU Cognitive Information Processing Systems Lab *Aug'20 - Dec'21*

*Graduate Research Assistant under professors **Hasan Davulcu**, **Steven Corman**, & **Scott Ruston***

- Working on Office of Naval Research(ONR) project an NSF-funded project for developing tools and machine learning models (NLP) for detecting and tracking events in adversarial mainstream and social media.
- **Technologies used are:** Python, Flask, PostgreSQL, Sklearn, PyTorch, Bert, PHP, Matlab.

ASU Decision Theater Network *Mar'20 - Aug'20*

Software Developer

- **Pulse a web application for various clients:** Designed and implemented a robust and scalable distributed computing service for collecting live tweets from Twitter to showcase different tweet analyses.
- **Technologies used are:** Python-Flask, Javascript, Reactjs, PostgreSQL, Celery, RabbitMQ, Sklearn, Keras, Elastic Search, RabbitMQ, Docker.

Qualcomm Inc *Jun'17 - Jan'20*

Software Engineer

- Developed a machine learning regression model to predict the performance metrics i.e. CPP of a chipset with an accuracy of 96%. **Technologies used are:** Python, SKlearn, Keras, Perl.
- Developed a dashboard to track builds health using the 5G timelines data by extracting the data from large non human readable files using the distributed processing.**Technologies used are:** Python-Django, PostgreSQL, Elastic Search, Celery, Redis.

Academic Projects

- **Smart Bill savings:** Developed a PAAS website in flask to store the receipts and create grocery list based on the data extracted from an image using google OCR. **GitHub Link**
- **Edge Computing:** Developed a system which can auto scale the resources based on the number of requests and reduce the cost of using AWS resources. **GitHub Link**
- **Wikipedia Search Engine:** Given a wiki dump of 42GB, this project retrieves the top 5 documents corresponding to the given query.
- **File sharing Protocol:** Developed a file transfer protocol via TCP/UDP using C/C++ to download and files.