Surya Akella

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EDUCATION

Columbia University New York
Master of Science in Computer Science GPA: (3.83/4.0) May 2023
Relevant Coursework: Distributed Systems, Cloud Computing and Big Data, Operating Systems, Advanced Big Data and AI, Algorithms, Programming Languages, Databases, Software as a Service, UI Design.

Guru Gobind Singh Indraprastha University New Delhi
B.Tech in Electronics and Communication Engineering GPA: (9.15/10.0). Nov 2020
Department Rank: 3rd out of 191.

SKILLS

- Languages: Python (Advanced), Javascript (Advanced), C++ , C , Go, Ruby.
- Technologies: AWS, React.js, Node.js, Vue.js, Django, Flask, MySQL, Pytorch, Tensorflow, OpenCV, Git, Flutter, Linux, GraphQL, Ruby on Rails, MongoDB, GCP.

WORK EXPERIENCE

Columbia Business School New York
Software Engineer May 2022 - May 2023

- Implemented lazy loading using Javascript for homepage images which reduced the bounce rate by 30%.
- Designed and built a backend database for eco-label which helps brand signup using AWS Dynamo DB, Lambda function, API Gateway for eco-label for different brands.
- Devised a frontend tracking feature for truck owners to locate their trucks improving operational efficiency by 25% using ReactJs and the Google Maps API.
- Performed automation testing on website that identified and resolved 3 security bugs in the authentication system, using Selenium and Python.

BlueStacks New Delhi
Member of Technical Staff Jul 2021 - Nov 2021

- Developed 50+ automation tests using Flutter for game.tv (2.0 version), saving 20% manual testing time and driving a better user experience with 5M+ active users.
- Performed a parallel execution method in Flutter, reducing the execution time of the sanity test suite by 50%.
- Devised Python script using OpenCV for efficient retrieval and organization of images across recursive folders, cutting down content managers time spent in locating and managing images by 50%.

Indraprastha Institute of Information Technology New Delhi
Research Assistant Jan 2021 - Mar 2021

- Incorporated the segmentation for an AI based 3D volumetric exploration for CT/MRI/cryo medical images, enabling doctors to experience an immersive VR-based environment for enhanced diagnosis using Slicer3D and Python.

Samsung Research and Development New Delhi
Software Engineer Feb 2020 - Jun 2020

- Developed a Convolutional Autoencoder using PyTorch for background removal, laying the foundation for seamless integration into Samsung's image processing pipeline and increasing workflow efficiency by 30%.

PROJECTS

- ResilientKV : Implemented a fault-tolerant and scalable key/value storage system using Paxos for agreement and sharding for improved throughput and load balancing in Go Lang and Google Cloud.
- DineBot : Created a serverless, microservice-driven Dining Concierge chatbot using AWS services, Amazon Lex, API Gateway, Lambda, S3, DynamoDB, ElasticSearch, and integrated with Yelp API for restaurant suggestions.
- Pantry : Conducted kernel hacking in C by replacing the existing file system driver for Linux, including disk formatting, mounting, file creation, directory listing, and lookup functionality.