Surya Akella

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EDUCATION

Columbia University New York
Master of Science in Computer Science GPA: (3.83/4.0) (Highest in Spring' 22) 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++ (Advanced), C, Go.
- Technologies: AWS, GCP, React.js, Node.js, Vue.js, Django, Flask, Linux, MySQL, MongoDB, DynamoDB, GCP, Material UI, Stripe, Docker, Pytorch, Tensorflow, OpenCV, Git, Flutter,

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 DynamoDB**, **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 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 **40%**.

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

- Kirana - Kirana is an end to end ecommerce web application for online grocery shopping. It leverages the power of **React.js**, **Material UI** on the Frontend, **Firebase** Authentication, **Node.js**, Edamame API, **MongoDB**, Express.js, and **Stripe** Payments to deliver a seamless and secure shopping experience for users.
- PortfolioOptimizer - Developed an investment strategy web application using **Django**, **React.js**, and **TensorFlow**, leveraging AI to identify financial trends, optimize portfolio, and predict future time series data.
- DineBot : Created a serverless, microservice-driven Dining Concierge chatbot using AWS services, **Lex**, **API Gateway**, **Lambda**, **S3**, **DynamoDB**, **ElasticSearch**, and integrated with Yelp API for restaurant suggestions.
- 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**.