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 India
B.Tech in Electronics and Communication Engineering GPA: (9.15/10.0). Nov 2020

WORK EXPERIENCE

Columbia Business School New York City
Software Engineer May 2022 - Present

- Devised a tracking feature leveraging React helped truck owners locate truck location leveraging Google Maps API.
- Designed the Database employing AWS, significantly reduced manual operations and augmented productivity by saving 50% time by taking care of brands signup and documentation.
- Established a Backend API for accepting documents in Jetty Java and constructed an upload feature page in ReactJs for Truck Drivers including token based authentication.
- Created a Automation Testing Framework caught 3 security bugs in authentication.

BlueStacks India
Member of Technical Staff Jul 2021 - Nov 2021

- Constructed a new automation test suite (2.0 release) utilizing Flutter. It was a key component to increase downloads on playstore to 5M+.
- Designed a task split method in flutter cut down sanity suite execution time by 50%.
- Built an image compressor employing OpenCV, decreased storage by 70% and increased worker productivity by 20%. Helped built a dashboard for images are published throughout the BlueStacks eco-system and content managers.

Samsung Research and Development India
Software Engineer Feb 2020 - Jun 2020

- Researched and devised a Convolutional Autoencoder utilizing Keras for background removal for Picture Editing Software.
- Researched and advised a sentiment analysis of Samsung emails applying Python NLP libraries.

Indian Institute Of Science Bangalore
Research Intern May 2019 - Jul 2019

- Developed a Convolutional Autoencoder with symmetric filters in core Tensorflow for denoising noisy images showed a strong correlation of symmetry and denoising performance.
- Introduced a novel idea from wavelet theory and performed a mathematical deduction. Showed symmetric filters should perform better at image denoising eventually.

PROJECTS

- ResilientKV : Implemented a fault-tolerant and scalable key/value storage system using Paxos for agreement and sharding for improved throughput and load balancing.
- 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 by implementing a file system driver for Linux, including disk formatting, mounting, file creation, directory listing, and lookup functionality.

SKILLS

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