Sai Sathvik.S

Evanston, IL 60201, 682-438-6014
sathu.sathvik@u.northwestern.edu linkedin.com/in/sathvik-sanagavarapu/ github.com/sathviksathu

Education

Northwestern University **Graduating December 2022**
Master of Science in Computer Science *Evanston, IL*
***Relevant Courses**: Machine Learning, Data Analytics*

National Institute Of Technology, Karanataka (NITK) **Aug. 2013 – May 2017**
Bachelor of Science in Computer Science (GPA: 8.04/10) *Mangalore, Karnataka*
***Relevant Courses**: Data Structures & Algorithms, Database Management, Computer Networks*

Technical Skills

Languages: Java, Python, C++, JavaScript, JSON, SQL, Design Patterns, REST, Kotlin, ReactJS.
Technologies: AWS, Docker, Spring Boot, PyTorch, Pandas, NumPy, OpenCV, MongoDB, Firebase.
Frameworks: Android Studio, Linux, GitHub, Agile tools, Jira, VS Code, Jupyter Notebook, LaTeX, Confluence, Postman.

Experience

Samsung Research **June 2017 – July 2021**
Senior Software Engineer *Bangalore, Karnataka*

- Commercialized an image preprocessor android library in USP application of Samsung Galaxy S21, SingleTake. Enabled emotion recognition, blur detection, and duplicate image detection in the camera and saved significant costs by replacing a third-party solution.
- Enhanced the inference latency of the 3-Class Eye-blink (Open, Closed & Partially Open) classification engine by 6% and boosted the accuracy by 5% using a lightweight CNN and augmenting public datasets with in-house data.
- Developed an SVM-based model trained on handcrafted features using sklearn to predict the best bokeh effect for camera captures. Enabled it in low-end mobile devices by converting it into a rule-based classifier.
- Prototyped a POC for fetching GIFs in real-time through REST API calls using a multi-threaded approach. It was later launched as an out-of-the-box feature for the Samsung Galaxy S10.
- Implemented front end Android Activity screen of an AR application to edit 3D Avatars adhering to Material UI/UX guidelines. Upgraded the codebase from Android 8 to Android 9 facilitating market release.

Samsung Research **May 2016 – July 2016**
Android Developer Intern *Bangalore, Karnataka*

- Designed UI and developed an application using system APIs to profile battery consumption in mobile devices by ranking running processes and their underlying threads according to their impact on CPU.
- The application was used as an optimization tool by developer teams across the organization.

IIIT Hyderabad **May 2015 – July 2015**
Summer Intern *Hyderabad, Telangana*

- Developed a web interface to track power consumption of electric devices connected to a smart strip in the university laboratory. Provided real-time analytics to achieve power savings of 12%.
- Incorporated an automatic shutdown facility through application to protect appliances from erratic voltages.

Academic Projects

PyCoWin Service | *Python, AWS* **April 2021**

- Automated checking covid vaccine availability in India by deploying an AWS Lambda function in python which was periodically triggered via AWS CloudWatch. Used AWS SES to send email notifications to subscribed users.

Real-time Bus Location Tracker App | *Java, Google Maps SDK, Android Studio* **November 2016**

- Created an android application to broadcast a bus's location to all registered clients on a real-time basis. Leveraged Google Maps SDK and an efficient database polling algorithm hosted on a server.

University Placement Website | *HTML, CSS, MySQL, PHP* **October 2017**

- Designed a web app aimed at solving career search problems that reached around 1000 students at my university. Used the classic WAMP web stack for the backend and designed a responsive front end using HTML, CSS, and AJAX.

Awards / Certifications

- **Awards**: Received 2 Spot awards and an annual award for exceptional contribution to Samsung's business through innovative technology and project execution.
- **Certifications**: AWS Fundamentals: Going Cloud-Native, Neural Networks & Deep Learning, Applied Machine Learning: Foundations, Python Data Structures.(All from Coursera)