Anirudh Srinivasa Raghavan

848-391-4742 | anirudhraghavan2000@gmail.com | linkedin.com/in/anisrirag | https://anirudhraghavan.me

Education

Rutgers University — New Brunswick, New Jersey
Masters of Science, Computer Science — *Aug. 2022 – May 2024*

PES University — Bangalore, India
Bachelors of Technology, Computer Science — *Aug. 2018 – May 2022*

Experience

Software Engineer Intern - Android OS — Jan 2022 – July 2022
Zebra Technologies — *Bangalore, India*

- Developed an open-source VCS for Android build sources, automating scanning and analysis of applications, resulting in a 70% reduction in manual testing effort for individual applications in a build
- Built highly scalable RESTful APIs using Django REST framework, Docker, and Kubernetes, handling over 1 million requests per day and ensuring seamless integration between systems
- Implemented advanced data querying and reporting techniques using SQL, generating comprehensive reports on app security, permissions, and releases for each build source program, enabling data-driven decision-making and enhancing overall app quality

Undergraduate Research Assistant — Aug 2021 – Dec 2021
Indian Institute of Science - ZEN Labs — *Bangalore, India*

- Developed a SpeechToText model for Boeing Inc, combining 5000 hours of unbiased dataset and generating 10% more data using selected YouTube videos for enhanced training
- Optimized Mozilla's deep speech model with CTC Beam Decoder for noisy airplane environments, achieving a 20% increase in recognition performance compared to the unmodified model
- Improved speech recognition accuracy in noisy airplane environments (60% SNR) by 15%, utilizing additional noises in the dataset, applying DeepDenoiser for noise reduction, and conducting rigorous testing

Student Researcher — May 2021 – Jul 2021
Athabasca University - Mitacs Fellowship — *Edmonton, Canada*

- Revamped and deployed an innovative, personalized recommendation system for the Next Stop mobile app, leveraging advanced technologies like React Native and MongoDB. This resulted in a significant increase in the AUC score to 0.88
- Implemented a cutting-edge Open Street Maps Synchronization service using PHP and Cron jobs to automate the updating process of offline location data. This streamlined the app's functionality and improved efficiency
- Made significant contributions to the codebase by adding over 10,000 lines of top-quality code via Git. These contributions significantly improved the app's performance and stability

Projects

Gesture Recognition using Graph Methods — Aug 2021 – May 2022

- Developed and implemented the graph cut algorithm using multithreading architecture, resulting in a significant improvement in processing speed and accuracy.
- Conducted rigorous testing with the deep learning classification method, achieving impressive results with an accuracy rate of 90%. Authored a Research Paper and won the best Oral Presentation award - ICIEA 2022

Pressure2Path | *FastAPI , Java, Maven, GCP, Git* — May 2018 – May 2020

- Developed a mobile application using Java and Android SDK to track GPS location and pressure sensor values every few milliseconds, resulting in the generation of a dataset for algorithm testing
- Designed and implemented a predictive algorithm for location based on pressure sensor data, achieving satisfactory results during testing. Built a multithreaded mobile app that performed computations on a cloud machine to provide accurate GPS location predictions in real-time.

Technical Skills

Languages: Java, Python, C/C++, SQL, JavaScript, HTML/CSS
Frameworks: React, Node.js, Flask, JUnit, Django, FastAPI
Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Libraries: pandas, NumPy, Matplotlib