Prabakar Chettiyar

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EDUCATION

M.S. Computer Science **Jan 2022 – Dec 2023**
Arizona State University, Tempe, AZ 4/4 CGPA
B.Tech. Computer Science and Engineering **2014-2018**
National Institute of Technology, Tiruchirappalli, IN 7.03/10 GPA

TECHNICAL SKILLS

Programming Languages: Java, JavaScript, TypeScript, C/C++, Python, Bash
Full Stack Development: Angular, React, HTML, CSS, Spring Boot, Django, Flask, MySQL, PostgreSQL, RESTful APIs
DevOps & Project Management: Jenkins, AWS, Docker, Kubernetes, Control-M, Git, JIRA, Agile

WORK EXPERIENCE

Software Development Engineer Intern: Amazon.com Inc, Seattle, WA May 2023 – Aug 2023

- Developed a solution allowing owners to upload and launch page configurations in the books team, providing validation, allowing edits and rollbacks of the page configs in the BRIXLayer platform.
- Implemented front-end web app in React, and back-end changes in Spring Boot to facilitate the migration from S3 to AWS App Config.

Software Engineer: Fidelity Investments, Chennai, India June 2018 – December 2021

- Developed Derivatives and Collateral Trade processing software for mutual fund services middle office operations using Spring Boot and AngularJS, ensuring real-time updates through ActiveMQ queues.
- Facilitated application deployment to AWS cloud leveraging Jenkins CI/CD pipelines and Docker, enhancing the efficiency and reliability of processes.
- Provided technical support for live production issues, performing RCA through Datadog, promptly resolving challenges, and minimizing downtime.
- Utilized JIRA for efficient project progress tracking and Git for version control.

Software Engineer Intern: Fidelity Investments, Chennai, India May 2017 – July 2017

- Developed a real-time feedback system using Angular, enhancing communication and feedback processes between associates and senior management.
- Collaborated effectively with diverse stakeholders in building robust enterprise software and coordinated between different teams.

RELEVANT PROJECTS

Medical Imaging, *Course Project* Jan 2023 - April 2023

- Colonoscopy Polyp Segmentation: Utilized UnetPlusPlus with ResNet-34 on ASU-Mayo Dataset to segment and localize polyps achieving Dice score and IoU score of 0.828 and 0.823 respectively.
- Chest X-ray Disease Classification: Leveraged Swin Transformer on NIH Chest X-ray dataset for multi-label classification of 14 thoracic diseases reaching ~95% accuracy for most labels and improving AUC to 0.78 after data augmentation.

Sentiment Analysis, *Course Project* Oct 2022 – Nov 2022

- Utilized Deep learning and NLP techniques to classify tweets into positive, negative, and neutral categories. Developed a user-friendly web application with Flask backend for real-time sentiment prediction on tweets.
- Implemented and compared various deep learning models including CNN, RNN, and BERT, achieving significant accuracy improvements with BERT. Conducted comprehensive data preprocessing and analysis using SemEval-2017 dataset.

SportsFete'17 Android app, *Club Project* September 2017

- Developed an Android application in Java that displays real-time scores and commentary for the college annual inter-departmental sports competition.
- Integrated Firebase libraries provided by Google for caching and real-time database operations.

AWARDS AND ROLES OF RESPONSIBILITY

- **Head of App development**, Spider R&D club, NIT Trichy 2015-2018. Oversaw the complete life cycle of mobile and web applications, leading to the successful launch of multiple projects that garnered positive user feedback.
- **Hackathons: Finalists-** Shaastra'16-Annual National level Tech. Fest. IIT Madras : Developed a resource allocation app for disaster management. 3rd Place, Ingenius hackathon, Bangalore 2016: Built an online debating app.