

# Prabakar Chettiyar

928-988-5617 • prabakarchettiy11@gmail.com • linkedin.com/in/prabakarchettiy11 • pchettiy.github.io

## EDUCATION

### M.S. Computer Science

Arizona State University, Tempe, AZ

Jan 2022 – Dec 2023

4/4 CGPA

### B.Tech. Computer Science and Engineering

National Institute of Technology, Tiruchirappalli, IN

2014-2018

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

- Engineered a solution that slashed the time required for page owners to upload and launch page configurations in the books team from multiple weeks to mere minutes using the BRILayer 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, providing validation, allowing edits and rollbacks of the page configs.

### 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 managing hundreds of trades per minute during market hours.
- Provided swift resolutions to live production issues, performing RCA through Datadog, minimizing system downtime.
- Facilitated application deployment to AWS cloud leveraging Jenkins CI/CD pipelines and Docker, enhancing the efficiency and reliability of processes.
- Managed multiple software releases catering to the diverse trade types which augmented the system's capabilities and boosted the company's revenue.

### Software Engineer Intern: Fidelity Investments, Chennai, India

May 2017 – July 2017

- Launched a user-centric 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

- Designed a user-friendly web application for real-time sentiment analysis of tweets into positive, negative, and neutral, using Deep Learning and NLP, employing Flask for backend operations.
- 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

- Founded and developed for the first time in college's history, an Android application that delivered real-time scores and commentary for the annual inter-departmental sports competition, built entirely from scratch.
- 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 : Built a resource allocation app for disaster management. 3<sup>rd</sup> Place, Ingenius hackathon, Bangalore 2016: Built an online debating app.