

ARAVIND VASUDEVAN

<https://github.com/AravindVasudev> | (412) 608-7267 | avasude2@andrew.cmu.edu | <https://aravindvasu.dev>

Education

Carnegie Mellon University – School of Computer Science

Master of Software Engineering – Scalable Systems

Pittsburgh, PA

December 2020

Anna University

Bachelor of Engineering – Computer Science

Chennai, India

May 2018

Coursework

DevOps, Engineering Data Intensive Scalable Systems, Architecture for Software Systems, Introduction to Machine Learning, Analysis of Software Artifacts, Object Oriented Analysis & Design, Introduction to Computer Systems.

Experience

GoDaddy Inc.

Intern — Software Development Engineer

Kirkland, WA (Remote)

May 2020 - Present

- Reduced execution time of our analytics tool by two hours by redesigning it into multiple processes.
- Devised an AWS Batch based architecture to parallelize analysis in our tool, which might further decrease runtime.
- Volunteered for the scrum master role to handle our meetings and retrospective documentations.

Zoho Corporation

Member Technical Staff

Chennai, India

June 2018 - May 2019

- Simplified transaction handling by implementing an annotation based framework using Aspect-Oriented Programming.
- Designed an internal HTTP connection pool library to work with multiple services simultaneously.
- Developed a library that loads multiple i18n keysets without collision in a project split across multiple repositories.
- Built a tool to manage configuration validation and building across multiple codebases.

Zoho Corporation

Project Trainee

Chennai, India

December 2017 - March 2018

- Architected an inter-service communication framework using observable pattern that can trigger distributed functions.
- Decoupled features in Zoho CRM into multiple repositories and designed them to work together as libraries.
- Rewrote several classes to migrate to our custom architecture.

Tata Consultancy Services

Project Intern

Chennai, India

June 2017 - July 2017

- Prototyped a chatbot to simplify data lookup in Planatics, a financial data management tool, using RASA NLU and flask.
- Learned to build microservices and REST API endpoints for service interaction.

Projects

Scalable Ecommerce Web Application

Carnegie Mellon University

- Implemented a data-intensive ecommerce application with around a million products.
- Used AWS RDS for database and ECS auto scaling group with load balancer to serve over a million requests/minute.
- Engineered distributed cache invalidation strategy and session storage using AWS ElastiCache.
- Optimized search queries by indexing and caching frequent searches to handle the load.

Smart Home System

Carnegie Mellon University

- Built a smart home platform using TCP sockets which can handle around 500 concurrent connections.
- Designed a CI/CD pipeline using Jenkins and Kubernetes that allowed single command update/rollback.
- Performed static/dynamic analysis in the pipeline using JUnit, JaCoCo, Checker Framework, PITest to monitor quality.
- Orchestrated an A/B testing component to split users between two ML models and analyze success rate in real-time.

Yabber

Personal

- Designed a group chat application using MEAN Stack.
- Implemented distributed session handling and message passing between sockets using redis.

Skills

Backend: Express (Node.js), Struts, Spring, Flask.

Database: MySQL, MongoDB, Redis, RabbitMQ.

DevOps: Docker, Jenkins, Vagrant, AWS, Ansible, Kubernetes.

Frontend: Angular, JQuery, SCSS, Electron, HTML, CSS.

Programming Languages: Java, Python, Javascript, C, Bash.