

# ARAVIND VASUDEVAN

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## Experience

### Meta Platforms, Inc.

Software Engineer

Sunnyvale, CA

April 2024 - Present

- Decreased ad retrieval service memory usage by 1.57GB by optimizing ad data fields, enabling efficient prediction models.
- Implemented efficient memory shedding strategy reducing OOMs under load by ~90% improving availability in Q4 2024.
- Designed a C++ compile-time flag to switch service data model based on build type which resulted in 1GB of memory savings.
- Enhanced the ad retrieval querying flow to support a new request type, enabling new predictive modelling experiments.

### Google LLC

Software Engineer III

Mountain View, CA

November 2021 - April 2024

- Mitigated resource exhaustion-related outages in LUCI CV for chromium/chromiumos related projects by architecting a redis-based quota manager that limits the number of concurrent presubmit runs per user.
- Updated LUCI CV authorization to support ACLs from linked google-chromium email accounts simplifying ACL management.
- Optimized gclient sync no-op runtime by 51.4% in windows that improved chromium developer experience.
- Redesigned depot\_tools to parse git submodules that unblocks chromium to move away from outdated DEPS.
- Reduced user frustration with git-repo by devising a condensed error summary UX that provided actionable next steps.
- Aided in master→main migration within the chromium project by contributing branch redirection feature to codesearch.
- Increased observability of xrefs coverage within chromium codesearch by building a metrics aggregation pipeline.

### GoDaddy Inc.

Software Development Engineer II

Kirkland, WA

March 2021 - November 2021

- Conceptualized a global control group feature which allows teams to access statistical impacts across a series of A/B tests.
- Integrated all our analytics services with monitoring tools to measure quality, availability, and performance of the product.
- Assembled a jenkins pipeline to test and auto-deploy projects using AWS CDK which is used by two new products.
- Volunteered for the scrum master role to handle our project backlog on Jira, scrum meetings, and retrospective.

Intern — Software Development Engineer

May 2020 - August 2020

- Reduced execution time of the analytics tool by two hours by redesigning it into multiple processes.
- Devised an AWS Batch based architecture to parallelize analysis in the analytics tool, which will further decrease runtime.

### Zoho Corporation

Member Technical Staff

Chennai, India

June 2018 - May 2019

- Simplified transaction handling by implementing an annotation-based framework using Aspect-Oriented Programming.
- Built an HTTP connection pool library that can share pools between modules separated across multiple codebases.
- Modularized i18n keysets by developing a library to load and validate keys across multiple repositories without collision.
- Distributed configuration across runtime-dependent repositories by building a tool to manage and validate conf files.

Project Trainee

December 2017 - March 2018

- Minimized dependency among teams by decoupling Zoho CRM into several compile-time independent components.
- Architected an observable-based inter-service communication framework that can resolve function calls at runtime.

### 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.
- Separated the chatbot service from the tool using microservice design-pattern and REST API for service interaction.

## Education

### Carnegie Mellon University – School of Computer Science

Master of Software Engineering – Scalable Systems

Pittsburgh, PA

December 2020

**Coursework:** Distributed Systems, DevOps, Engineering Data Intensive Scalable Systems, Architecture for Software Systems.

**Teaching Assistantship:** 17323/17623: Quality Assurance. October 2020 - December 2020.

**Capstone Project:** Led a team of 5 and architected an extensible bridge library that enabled Rebion Inc.'s Blinq devices to communicate with any EHR system using configurations.

### Anna University

Bachelor of Engineering – Computer Science & Engineering

Chennai, India

May 2018

## Skills

**Programming Languages:** C++, Python, Javascript/Typecript, Java, SQL, Bash, Go.

**Web:** Node.js, Spring, Flask, Struts, Thrift, Protobuf, RPC, Angular.

**Databases & Storage:** MySQL, Spanner, Redis, MongoDB, HDFS, RabbitMQ, S3.

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