HRUSHIKESH VAIDYA

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EDUCATION

University of Southern California August 2024 - May 2026
Master of Science, Computer Engineering *GPA: 3.93*
Coursework: Analysis of Algorithms, Computer Networks, Network Security, Cloud Computing, Image Processing

SKILLS

Technologies:	Django, PostgreSQL, MongoDB, Spring, React, Flutter, React Native
Tools:	AWS, Google Cloud Platform, Azure, Linux, Docker, Kubernetes, Git, CI/CD, Redis
Languages:	Python, JavaScript, Java, Dart, C/C++

EXPERIENCE

Tugoz LLC June 2025 - Present
Software Engineering Intern *Los Angeles, CA*

- Developed a cross-platform **event management mobile application** using **Flutter**, enabling users to browse, book, and manage event tickets
- Translated existing **CryptoJS**-based request signing, encryption, and authentication library to **Dart** for use in Flutter apps
- Created testing and production environment for **Flutter** applications, integrating **Firebase Test Lab** and **AWS Device Farm**
- **Implemented CI/CD pipelines** for automated building, testing, and publishing of Flutter apps to Play Store and App Store
- Built test suites using **Dart** and **Mockito**, conducted physical and simulated tests, achieving **over 90% code coverage**

Wide Wings Media July 2023 - July 2024
Fullstack Developer *Pune, India*

- Re-architected existing monolithic **LAMP** stack based application, replacing it with a **Django-Postgres** stack, leading to a ~45% increase in traffic and ~30% increase in user retention over 6 months
- Designed a robust cloud architecture on **AWS ElasticBeanstalk**, maintaining P95 latency below 100ms with ~**10,000 concurrent users**.
- Configured **AWS Elastic Load Balancing**, **CloudFront**, and **Route53 DNS** to successfully handle ~500,000 daily users

Mastercard May 2023 - July 2023
Software Development Intern *Pune, India*

- Reduced data transformation latency between microservices by authoring a **serialization** protocol in **Spring** to translate between **protocol buffer** and **AVRO**-based schemas
- Tested and validated the protocol in simulated payment networks, reducing serialization delay by **up to 30%**
- Wrote a proof-of-concept **Spring Boot** application for implemented protocol, hosted on Mastercard's internal repository

PROJECTS

Django Core Contributor

- Submitted over **15 accepted pull requests** adding patches, bug-fixes, and new feature additions to Django's core codebase
- Submitted three **Google Summer of Code** proposals (2022, 2023, 2025) for core-level improvements including **rate-limiting, CORS/CSP support**, and admin interface tooling

Microsoft Office Math Markup Language Parser

- Created a Python library to **extract mathematical equations**, text, and images from Microsoft Word (.docx) files, including a **conversion API** for converting extracted equations into **LaTeX**
- Hosted on PYPI under the name **docxlatex**, with ~**1000 downloads** a month

RESEARCH EXPERIENCE

Adaptive Computing Experiences Lab October 2024 - May 2025
Research Assistant *University of Southern California*

- Developed SciSO, an end-to-end pipeline for extracting scientific citation graphs from StackOverflow data, studying dissemination of theoretical research and impact of scientific citations on modern trends in software development
- Authored **SciSO: Mining Science in StackOverflow**, submitted to the **Mining Software Repositories '25** Conference
- Designed and developed **TSAR (Tracing Sustainability in ARchitectures)**, a tool for analyzing sustainable software architectures