

HRUSHIKESH VAIDYA

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EDUCATION

University of Southern California

Master of Science, Computer Engineering

Coursework: Algorithms, Software Engineering, Computer Networks, Network Security, Cloud Computing, Image Processing

August 2024 - May 2026

GPA: 3.93

EXPERIENCE

Tugoz LLC

Software Engineering Co-op

August 2025 - Present

Los Angeles, CA

- Created testing and production environments for Flutter applications, integrating with 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 for Android and iOS platforms, conducted physical and simulated tests, achieving over 90% code coverage

Tugoz LLC

Software Engineering Intern

June 2025 - August 2025

Los Angeles, CA

- Designed state architecture, data model, and client-side caching policy for an event management Flutter application, reducing server load by 15%
- Translated existing JavaScript-based request signing, encryption, and authentication library to Dart for use in Flutter apps
- Wrote Dart services to interact with API endpoints for user authentication, ticket validation, and other CRUD views

Wide Wings Media

Fullstack Developer

July 2023 - July 2024

Pune, India

- Re-architected existing monolithic LAMP stack for ticketkhidakee.com, 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, maintaining P95 latency below 100ms with ~10,000 concurrent users.
- Configured global CDN on AWS CloudFront and designed a caching policy successfully handling ~500,000 daily users

Mastercard

Software Development Intern

May 2023 - July 2023

Pune, India

- Authored a serialization protocol to translate between protocol buffer and AVRO-based schemas for event-driven applications
- Facilitated communication between heterogeneous serialization formats, reducing data transformation delay by ~15%
- Wrote a proof-of-concept Spring 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

- Wrote 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](https://pypi.org/project/docxlatex/) under the name [docxlatex](https://pypi.org/project/docxlatex/), with ~1000 downloads a month

RESEARCH EXPERIENCE

Adaptive Computing Experiences Lab

Research Assistant

October 2024 - May 2025

University of Southern California

- Developed [SciSO](https://sciso.usc.edu/), 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

SKILLS

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