HRUSHIKESH VAIDYA

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EDUCATION

University of Southern California *August 2024 - May 2026*
Master of Science, Computer Engineering *GPA: 4.0*
Research Assistant at the Adaptive Computing Experiences Lab (ACE)

EXPERIENCE

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

- Fully redesigned the existing website for ticketkhidakee.com, replacing the existing LAMP stack 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 during extreme traffic peaks.
- Configured global CDN on AWS CloudFront and designed a caching policy to handle ∼500,000 daily users

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

- Wrote a serde protocol to translate between protocol buffers and AVRO schemas for event-driven applications
- Facilitated communication between heterogenous serialization formats between services, reducing the time taken for data transformation by ∼50%
- Wrote a proof-of-concept Spring application for the implemented schema translation protocol.

CO-CURRICULAR WORK

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

- Worked under Prof. Souti Chattopadhyay at the Adaptive Computing Experiences Lab (ACE) at USC
- Authored "SciSO: Mining Science in StackOverflow", submitted at the Mining Software Repositories '25 Conference
- Currently studying sustainability in software architectures, developing TSAR (a tool for Tracing Sustainability in ARchitectures).

Django August 2022 - Present
Contributor

- Contributed over 15 accepted pull requests adding patches, bug-fixes, and new feature additions to Django
- Submitted a GSoC 2022 proposal for adding rate-limiting to Django core and a second GSoC 2023 proposal to include CORS and CSP support in Django core

PROJECTS

docxlatex

- Wrote a Python library to extract mathematical equations, text, and images from .docx files
- Included a conversion API for converting extracted equations into LaTeX
- Hosted on PYPI under the name docxlatex, with ∼1000 downloads a month

MJXGUI

- Created an open source WYSIWYG equation editor for the web with a GUI for creating equations similar to Google Docs or Microsoft Word
- Wrote an API for conversion of created equation into LaTeX for convenient storage and/or rendering

SKILLS

Tools:	AWS, Google Cloud Platform, Docker, Git, Kubernetes, CI/CD
Technologies:	Django, Spring, Node.js, Flutter, React, React Native, MongoDB
Languages:	Python, C/C++, JavaScript, Java, Dart
Coursework:	Algorithms, Operating Systems, Computer Networks, Cloud Computing, Image Processing