

VIVEK KUMAR MASKARA

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[Website](#) • [Github](#) • [LinkedIn](#)

Education

Master of Science, Computer Science

Arizona State University - Tempe, Arizona, USA

Expected in 12/21

GPA:4.0

Relevant Coursework: Statistical Machine Learning, Data Mining, Cloud Computing, Data Visualization

Bachelor of Technology, Software Engineering

Delhi Technological University - New Delhi, India

05/16

GPA: 3.34

Relevant Coursework: Computer Graphics, Artificial Intelligence, Object-Oriented Programming, and Digital Image Processing

Work History

Graduate Research Assistant

02/20 to Present

The Luminosity Lab, ASU – Arizona, USA

- Streamlined the process of producing and delivering PPE kits by building ASU's [PPE response](#) network.
 - ~150 volunteers contributed ~300 3D printers to produce, sterilize and deliver ~14000 PPE kits for COVID facilities in Arizona.
 - Built the app using Flask, ReactJS and Google Cloud PostgreSQL, leveraging Github Actions for CI, Google App Engine for deployment and Cloud CDN for caching of static resources.
- Responsible for the end-to-end development of Customer 360 web-dashboard for ~9000 Bank of West employees using Neo4J graph database, Flask and React and setting up production deployments using Docker.
- Published a gamified supply chain management iOS & Android app using React Native funded by USAID for a large [user study](#) in Ghana.

Senior Software Engineer

06/16 to 11/19

Zeta, Directi – Bangalore, India

- End-to-end ownership of Zeta's [cashless cafeteria solution](#) for Android based POS devices and Raspberry Pi based self-serve Kiosks
 - Played a key role in developing NFC & RFID based contactless payments and QR code based Kiosk payments attributing to 1 million+ monthly transactions.
 - Brought downtime to absolute 0 by building a completely offline payment experience for resilience against server outages.
 - With ~500 transactions happening per hour per device, I maintained over ~99% crash free rate to allow smooth operations.
 - Ensured availability of detailed analytics using Firebase, BigQuery and DataStudio for traceability of offline scenarios.
- Added support for scheduling customizable PostgreSQL and Redshift reports in Zeta's Spring Boot based reporting service.
- Achieved sub-10ms p99 latencies for NFC tag authorization in payment flow using memcache and optimizing PostgreSQL queries.

Projects

Image Recognition As a Service, Cloud Computing Project, ASU

01/20 to 05/20

- Built a real-time object detector service using YOLO, AWS cloud and Python based Raspberry Pi scripts beating the baseline performance.
- Effectively utilized EC2, S3 and SQS for parallel processing of videos while controlling demand based load-balancing of EC2 instances.

Kiosk Burner, Zeta

11/18 to 04/19

- Completely automated the deployment of Kiosk, self-serve devices bringing down the SLA from 7-10 days to less than 30 minutes
- Built an Electron-based app to burn the Raspbian OS and modify the boot sequence to install and configure Zeta's Kiosk app.

Volunteering

Wikimedia Foundation

03/17 to Present

- Actively contributing to the Wikimedia Commons Android app as a developer, mentor and project maintainer.
- Mentoring students during summers for Google Summer of Code, Outreachy and Google Code In since 2018.

Skills

- Languages: Python, Java, Kotlin, Node.js, SQL, Javascript
- Databases: PostgreSQL, MySQL, Redshift, and Neo4J
- Platforms and tools: AWS, GCP, ELK stack, Flask, Spring Boot, and React

Notable Highlights

- Published over 30 mobile applications with over 1 million total downloads
- Published 100+ of blog posts on [Windows App Tutorials](#), [Tutsplus](#), [ProAndroidDev](#) and [Towards Data Science](#).
- Zeta: Stellar performer award in first year and outstanding performer award for next two consecutive years.
- 2nd in Envision, software display event by Troika (IEEE society, DTU)
- 3rd in an all Delhi BITS BYTES event for software display.