

VIVEK KUMAR MASKARA

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

Work History

Student Researcher

02/20 to Present

The Luminosity Lab, ASU – Arizona, USA

- Developing a machine learning model for detection of Neuroblastoma using histopathological images for PCH hospital.
- Researched and built the MVC for indoor parking automation using YOLO and DeepSort for real time vehicle tracking.
- Contributed to the backend for ASU's end to end PPE response network for producing and delivering medical supplies.
- Built a Customer 360 dashboard for Bank of West using Neo4J graph database, Flask backend and React for frontend.
- Published a gamified supply chain management learning app funded by USAID, ShipShape for iOS and Android.

Senior Software Engineer

06/16 to 11/19

Zeta, Directi – Bangalore, India

- Built NFC based contactless payments & custom ordering solution for POS attributing to **1 million+** monthly transactions.
- Built the interface for Zeta's rule engine using the Camunda DMN Decision Engine as part of the internal data science toolkit.
- Contributed to over 20+ projects in Zeta spanning across Android, Raspberry Pi and backend microservices.
- Built an assistant bot to order food using Google's conversational AI.
- Responsible for optimizing query performance for PostgreSQL and building throughput and service health monitoring dashboards using Grafana and Kibana.

Education

Master of Science, Computer Science

Expected in 12/21

Arizona State University - Tempe, Arizona

GPA:4.22

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

Bachelor of Technology, Software Engineering

05/16

Delhi Technological University - New Delhi, India

GPA: 3.34

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

Projects

Grain Measurement System, Inweon

08/15 to 05/17

- Used linear regression and segmentation algorithms to analyze rice particles with 99% accuracy.
- Used in 100+ rice mills across India with 1000+ readings taken on a daily basis.

Flight Departure Delay Prediction, Major Thesis

01/16 to 05/16

- Compared prediction accuracies using Bayesian networks, Decision Trees & Logistic Regression
- Achieved an accuracy of 90% with the J48 Decision Tree.

Code Analyzer for Plagiarism Detection, Minor Thesis

08/15 to 12/15

- Used unsupervised K-means and K-medoids clustering algorithms to detect plagiarism in coding competitions.

Volunteering

Wikimedia Foundation

03/17 to Present

- Actively contributing to the Wikimedia Commons Android app as a developer, mentor and project maintainer.
- Have received multiple project grants and travel [scholarships](#) to participate in annual conferences and hackathons.
- Have been mentoring students during summers for Google Summer of Code, Outreachy and Google School since 2018.

Skills

- **Languages:** Python, Java, Kotlin, and MATLAB
- **Databases:** PostgreSQL, Cassandra, Redshift, and Neo4J
- **Platforms and tools:** AWS, GCP, Tensorflow, ELK stack

Certifications

- **TensorFlow in Practice Specialization** by DeepLearningAI 02/20
- **Convolutional Neural Networks** by DeepLearningAI 02/20
- **Fundamentals of Digital Image and Video Processing** by Northwestern University 06/19

Awards

- 2nd in Envision, software display event by Troika (IEEE society, DTU)
- 3rd in an all Delhi BITS BYTES event for software display