Ashish Kulkarni

+1 (951) 830-6655 ashish2002kulkarni@gmail.com
linkedin.com/in/ashishkulkarnii ashishkulkarnii.github.io github.com/ashishkulkarnii

Education

University of California, Riverside *Riverside, CA*
Master of Science in Computer Science and Engineering Sep 2025 – Dec 2026

PES University *Bengaluru, KA, India*
Bachelor of Technology in Computer Science and Engineering (CGPA: 8.03 / 10) Dec 2020 – May 2024

- 3x **Distinction Award** recipient. Specialization in **Machine Intelligence and Data Science.**
- **Undergraduate Teaching Assistant** for a 6th semester course on **OOP concepts**, supporting 180+ students. Click to see the learning materials I created.

Experience

Nasdaq *Bengaluru, KA, India*
Software Engineer Jul 2024 – Sep 2025
Software Development Intern Jun 2023 – Jun 2024

- Jump-started a new ML-based Advisory Technology product as the primary **Python** developer: built a minimum viable product, presented it to product leadership, and took the project to prototype phase.
- Designed, developed, and maintained **microservices** for backend processes, and led the end-to-end **Python** process development–from prototype to production–implementing custom **named entity recognition**, **LLM** integration, fuzzy string-matching, and writing Terraform for **AWS**-powered infrastructure.
- Architected and developed a new web-crawling pipeline using **Selenium WebDriver** and a custom **BFS**-based algorithm, improving mining speed by approximately **5x**.
- **Regional winner** and **global finalist** of the 2023 intra-company hackathon by leveraging **LLMs** for custom **Terraform** script generation.
- **Mentored** at a 6-month **ML bootcamp** for 30+ employees at Nasdaq Bengaluru.

StanceBeam *Bengaluru, KA, India*
Computer Vision Intern Jun 2022 – Aug 2022

- Implemented the usage of **stereo vision** and **epipolar geometry** to compute the 3D coordinates of a subject, to be used in a future decision review system for cricket.
- **Technologies**: OpenCV, NumPy, Python3

Projects

OpenGL Projects | *C++, GLUT*
This repository contains projects I built while studying the Fundamentals of Augmented and Virtual Reality at PESU, under Dr. Adithya Balasubramanyam. My work ranges from basic 2-d projects, such as generating the **Sierpinski triangle fractal** using the chaos method, visualizing **Graham's scan algorithm**, all the way up to implementing elastic **sphere collisions** in 3-d space.

Glaucoma Diagnosis from Retinal Fundus Images | *Python, TensorFlow, scikit-learn*
Evaluating popular **CNN** architectures and **histogram equalization**-based preprocessing techniques on classifying a retinal fundus image into normal or glaucomatous. Click to see our results, read our preprint, or see my GitHub repo.

covibot | *Python, PRAW*
A Reddit bot (Top 5 at a hackathon) which gives COVID-19 stats of a specific region without an explicit call, using low-level NLP, and accessing government datasets. I turned my learnings into a 3-part guide on Analytics Vidhya, which you can generally find ranked on the first page of Google search results for *how to make a Reddit bot*.

Skills

Languages: Python, C++, Java, C, SQL
Concepts: Operating System, Artificial Intelligence, Machine Learning, Neural Networks, Database, Agile Methodology, Cloud Computing, Generative AI, Large Language Models, Computer Vision, Data Science, Computer Networks, Graphs
Certifications: Principles of Secure Coding, *Udemy*; AWS Educate Introduction to Cloud 101, *Amazon Web Services*; Quantum Computing Using Qiskit, *PESU I/O*; LFD103, *The Linux Foundation*
Personal: I love playing and listening to music, anything outdoors from hiking to biking, and traveling.