



ANKUR KOHLI

SOFTWARE ENGINEER

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[ANKUR KOHLI - PORTFOLIO](#)

Aspiring Software Engineer with a strong foundation in Python, C/C++, Dart, Flutter, Java, Bash, JavaScript, API driven client server development, & advanced technologies.

ABOUT ME

Proactive Software Engineer with expertise in frontend development and robust, API driven backend client server systems. Experienced in building scalable architectures with reliable integration and realtime execution. With a strong foundation in AI, native frontend, and backend systems, I excel at problem solving, delivering high performance, and cutting edge solutions. Passionate about collaborative development, continuous improvement, and advancing project success through maintainable code, and software principles.

PROFESSIONAL EXPERIENCE

• Software Engineer

April 2025 - October 2025

NTT DATA Italia

Italy

- Developed and managed cross platform Flutter frontends with a UI/UX focus and realtime, multithreaded backends, ensuring secure, low latency communication for intelligent systems.
- Led the development and deployment of an autonomous NAV2 SLAM pipeline using Dockerized ROS2, CI/CD, and tested on a real robot for hardware agnostic scalability.
- Enhanced system reliability through structured integration testing, validation, and debugging workflows using GitLab CI/CD, which reduced post deployment errors.
- Drove agile cross team collaboration through technical documentation, architectural design, and specifications, turning research concepts into deployable, high performance systems.

• Thesis Project

June 2023 - February 2024

NTT DATA Italia

Italy

- Researched and developed realtime, multithreaded architectures to improve robotic system efficiency by 30%, optimizing inter process communication and latency.
- Built and deployed SLAM based mapping and navigation pipelines in Dockerized ROS2 with CI/CD workflows, enabling hardware independent scalability and reducing deployment time by 25%.
- Tested, validated, and debugged software using GitLab CI/CD, increasing system reliability and uptime by 20%.
- Authored comprehensive technical documentation, improving team productivity and maintainability across projects.

PROFESSIONAL SKILLS

TECHNICAL SKILLS

Programming Languages:

Python, C/C++, Java, Dart, HTML5, CSS3,
Bash, Powershell, JavaScript

Libraries:

OpenCV, PyTorch, TensorFlow, OpenAI

APIs:

JSON, WebSocket Services

Software & Tools:

Ubuntu/Linux, WSL, Docker, Git/GitLab,
Flutter, CI/CD Pipelines, VS Code

SOFT SKILLS

Leadership & Planning:

Strategic Planner, Project Management,
Mentoring

Innovation & Problem-Solving:

Creative Spirit, Concept Development

Teamwork & Collaboration:

Conflict Resolution, Reliable Organized

CERTIFICATIONS

| | |
|---|----------------|
| • Microsoft: Azure Fundamentals | November 2025 |
| • Google Cloud Skills Boost: Responsible AI: Applying AI Principles with Google Cloud | January 2025 |
| • Google Cloud Skills Boost: Introduction to Responsible AI | January 2025 |
| • Google Cloud: Innovating with Google Cloud AI | December 2024 |
| • Google Cloud Skills Boost: Introduction to Generative AI | October 2024 |
| • Amazon Web Services (AWS): Introduction to Machine Learning: Art of the Possible | September 2024 |
| • Amazon Web Services (AWS): Introduction to Robotics on AWS | September 2024 |

EDUCATION

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|--|-----------------------------|
| • M.Sc Computer Engineering (Specialization: Robotics Engineering) | September 2021 - March 2024 |
| University of Genoa | Italy |
| • B.Tech Mechatronics Engineering | July 2016 - June 2020 |
| University of Petroleum & Energy Studies | India |

PROJECTS

- Artificial Intelligence Portfolio
- Frontend Portfolio
 - Responsive Website Design: This project hosts a restaurant website implemented using HTML, CSS, and some minor functions in JavaScript, demonstrating front-end development skills and basic web design principles. [QR]
 - Interactive Game using JavaScript: This project is a web based Rock-Paper-Scissors game that features dynamic gameplay, intuitive design, and a responsive layout, where complete JavaScript logic for user choices, game rules, and automated scoring has been implemented. [QR]
- Automated Warehouse Scenario Using PDDL 2.1: This project aims to create an AI planning warehouse optimization system that enhances order management, storage efficiency, and logistics through advanced planning, priority queues, plan graphs, and realtime analytics. [QR]
- Task and Motion Planning for Robotics in Coffee Shop Scenario: The goal of this project is to integrate task and motion planning for robotic navigation using PDDL based planners, state space graphs, BFS, heuristic search, and Euclidean distance computation. [QR]
- Machine Learning Portfolio
 - Cervical Cancer Detection using CNNs and VGG16 Module - TensorFlow: The objective is to deploy Deep learning based cervical cancer detection using VGG16 Convolutional Neural Network (CNNs) in TensorFlow with comprehensive preprocessing, training, and evaluation. [QR]
 - Convolutional Neural Networks (CNNs) to Process an Image - PyTorch: The goal of this experiment is to implement Convolutional Neural Networks (CNNs) in Jupyter/Python using PyTorch for efficient image processing and analysis with deep learning techniques. [QR]
- Robotics Portfolio
 - Software Architecture for Mobile Robot Control: This assignment involves developing a software architecture for controlling a ROS based mobile robot by applying graph based routing, Dijkstra's algorithm, and Python implemented controller/UI nodes. [QR]

HOBBIES

- Photography
- Hiking
- Chess
- Cricket
- Traveling
- Driving

REFeree

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