

VIBHAV INNA KEDEGE

MSc Embedded Systems (Honours), BSc Electrical Engineering

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📍 Rotterdam, The Netherlands

- Date of Birth: 27th July 1995
- Nationality: Dutch (Netherlands, EU) & Indian (OCI)



PROFESSIONAL EXPERIENCE

Alfen N.V.

DevOps Software Engineer | R&D Department

📅 Oct 2023--Ongoing 📍 Almere, The Netherlands

- Designing and developing software systems for Hardware-in-the-Loop (HIL) automated testing of Electric Vehicle charging stations using **Python** (Flask API), Jenkins, Docker, Linux servers, and Azure.
- Building data-driven software solutions for real-time test automation analytics using **Python** (FastAPI), PostgreSQL, Grafana, Docker, and Nginx.
- The Impact - Implementing CI/CD pipelines that run and monitor over 2,000 automated HIL tests daily, reducing software delivery time from 12 weeks to 2 weeks.

KPN (via Capgemini)

Big Data Analyst | In-Home Device analytics team

📅 Oct 2021--Sep 2023 📍 The Hague, The Netherlands

- Contributed to the development of scalable data pipelines to monitor and analyze KPN internet devices across the Netherlands using Spark, Scala, **Python**, and Tableau.
- Implemented a machine learning system to predict customer satisfaction from real-time health metrics of KPN's network devices, using Spark MLlib and Random Forest algorithms.
- The Impact - Analyzed data from 1 billion KPN internet devices across the Netherlands, enabling proactive Internet quality management and reducing customer churn rate.

Almende B.V.

Robotics Researcher | R&D Department

📅 Jun 2020--Aug 2021 📍 Rotterdam, The Netherlands

- Designed distributed planning algorithms for multi-robot teams performing Simultaneous Localization and Mapping (SLAM) using **Python**, C++, and ROS. (Project Link)
- The Impact - Contributed to research on multi-robot planning and co-authored a publication presenting findings from a specific case study. (Link)

Alstom Transport

System Engineer - Train Networks | Train Control Department

📅 Jul 2017--Jul 2019 📍 Bangalore, India and Sydney, Australia

- Collaborated on the design of Ethernet-based Train Control and Monitoring Systems (TCMS) for autonomous trains and performed functional testing of train control software on operational metro lines in India and Australia.
- The Impact - Achieved a 90% network functionality pass rate, completing validation 3 months ahead of schedule.

PERSONAL STATEMENT

"Proactive professional with 5+ years of experience in Software Design & Architecture, Data Analysis, and Artificial Intelligence. Enthusiastic about collaborating with Agile teams to leverage data in solving complex global challenges."

EDUCATION

Delft University of Technology

MSc Embedded Systems (Honours)

📅 2019 - 2021 📍 Delft, Netherlands

- Specialisation - Artificial Intelligence (AI) and Robotics.
- Thesis - "Multi Robot Exploration and Planning in limited communication environments" (Link).
- Published at ICAART 2022 (Link).

National Institute of Technology
Karnataka (NITK-Surathkal)

Bachelor of Technology, Electrical and
Electronics Engineering

📅 2013 - 2017 📍 Mangalore, India

- Specialisation - Embedded Software
- Thesis - "Multiple Interface Automation using Distributed Embedded Devices" (Link)

TECHNICAL SKILLS

Python	●●●●●●●●
Software System Design	●●●●●●●●
Machine Learning & AI	●●●●●●●●
Tensorflow	●●●●●●●●
Linux Systems	●●●●●●●●
CI/CD Tools (Jenkins, Docker)	●●●●●●●●

CERTIFICATIONS

- Software Product Management (Ongoing)
- Google Advanced Data Analytics Specialization (LINK)
- DeepLearning.AI TensorFlow Developer Specialization (LINK)
- Professional Scrum Master I (LINK)

RELEVANT PROJECTS

Stock Monitor App

Self Learning Project

📅 Jan 2025--Present

- Designed a lightweight cloud application to monitor and predict stock prices of S&P 500 companies using **Python** and Docker. (LINK)
- The Impact - Enables users to visualize closing prices, perform correlation analyses, and track yearly changes of selected stocks.

LLM Fitness Application

Self Learning Project

📅 May 2025--Present

- Implemented a lightweight fitness application that generates personalized workout and diet recommendations using **Python**, Langflow, HuggingFace, and Meta Llama 3.3. (LINK)
- The Impact - Enables users to receive customized fitness guidance and diet adjustments through a Retrieval-Augmented Generation (RAG) approach.

MLOps for Image Segmentation

Freelance Project

📅 Apr 2023 - Jul 2023

📍 Delft, Netherlands

- Designed an MLOps software solution for automated training of computer vision models, including object detection (**Yolov8**) and image segmentation models (**SAM**) using **Python**.
- The Impact - Enabled a startup (**XOSight BV**) to perform daily training of computer vision models on a dataset exceeding 100,000 images.

Reinforcement Learning Sensitivity Analysis

Academic Project

📅 Sep 2020

📍 Delft, Netherlands

- Implemented Reinforcement Learning algorithms (SARSA and Q-Learning) on OpenAI Gym environments.
- Conducted performance comparisons by tuning hyperparameters to optimize algorithm efficiency
- Project Link: (LINK)

EXTRA-CURRICULARS

- Regular half marathon runner (5+ events) (LINK)
- Landscape photography enthusiast (LINK)
- Drone photography creator (LINK)
- Rhythm guitar basics (LINK)
- Blog writer on Medium (LINK)
- Awarded the Visionary Engineer award at Alstom Transport for excellence in planning and scheduling
- Head of the Indian Society for Technical Education (ISTE-NITK) technical student club during Bachelor's studies
- Volunteered regularly to support underprivileged students in Indian government schools during Bachelor's studies

MANAGERIAL SKILLS

Project Planning

Collaboration

Customer Interaction

Agile Working

Scrum

Mentoring and Training

KNOWN LANGUAGES

English

Dutch (A2)

German (A1)

Hindi

Kannada

HOBBIES

Running

Tennis

Cycling

Photography

Learning Languages

Guitar