

VIBHAV INNA KEDEGE

MSc Embedded Systems (Honours), BSc Electrical Engineering

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📍 Rotterdam, Netherlands

- Date of Birth: 27th July 1995
- Nationality: Indian & Dutch Permanent Resident



PROFESSIONAL EXPERIENCE

Alfen N.V.

Software Engineer

📅 Nov 2023--Ongoing 📍 Almere, The Netherlands

- Design Software Systems that implement Behaviour Driven Development (BDD) of Electric Vehicle Charging station Firmware using **Python**, Linux and CICD tools like Jenkins, Docker & Ansible.
- Monitor software quality and help drive Data-Driven Decision Making using **Python**, SQL, Apache Devlake and Grafana.

KPN (via Capgemini)

Big Data Analyst

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

- Designed Data Analytics Systems to monitor 1 Billion KPN internet devices across the Netherlands using Spark, Scala, **Python** and Tableau.
- Analysed data (in the order of millions) using Tableau to facilitate operational decision making.
- Implemented a **Python** based Deep Learning solution to perform multi-class classification of silicon wafer defects. (Link)

Agni AI

Machine Learning Consultant

📅 Mar 2023--Jul 2023 📍 Delft, The Netherlands

- Designed an MLOps software solution to help a startup (XOSight BV) implement Computer Vision object detection and image segmentation models using **Python**.

Alstom Transport

System Engineer - Networks and Train Control

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

- Implemented Ethernet Network based Train Control & Monitoring Systems (TCMS) on Autonomous Metro Trains under a Model Based Design (MBD) framework.
- Designed wireless fault diagnostic systems for Predictive Maintenance of metro trains.

PERSONAL STATEMENT

'A proactive and goal oriented professional with 5+ years of experience in Python Software Design, Linux Systems, Big Data Analytics and AI, who enjoys solving complex problems in Agile teams'

EDUCATION

Delft University of Technology

MSc Embedded Systems (Honours)

📅 2019 - 2021 📍 Delft, Netherlands

- Specialisation - Robotics and Artificial Intelligence (AI).
- 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
Linux/Bash
C++
Jenkins
Git



CERTIFICATIONS

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

RELEVANT PROJECTS

Machine Learning App

Self Learning Project

📅 Aug 2024--Present

- Created a lightweight application to understand Machine Learning Algorithms. (LINK)
- Developed the application using **Python** and Docker.
- GitHub Code: (LINK)

Drone Flight Controller

Group Academic Project

📅 Aug 2020--Nov 2020

📍 Delft, Netherlands

- Implemented the embedded software (in C and **Python**) on an ARM Cortex micro-controller to control a physical quad-rotor using a joystick.
- Predominantly designed the digital filters for robust sensing and PID controller & sensor fusion module for stable flight control.
- Project Link: (LINK)

Autonomous Driving using Computer Vision

Group Academic Project

📅 May 2020--June 2020

📍 Delft, Netherlands

- Implemented lightweight neural network models for the autonomous driving of embedded robotic cars.
- Developed the Convolutional Neural Network (CNN) architecture in **Python** and proved its working on a simulator.
- Project Link: (LINK)

Cooperative planner for Swarm Robots

MSc Internship Project

📅 Jun 2020--Aug 2020

📍 Rotterdam, Netherlands

- Compared environment exploration algorithms for multiple mobile robots using **Python**, C++ and Robot Operating System.
- Designed the distributed approach of a centralised SLAM based algorithm.
- Project Link: (LINK)

EXTRA-CURRICULARS

- Regular half marathon runner (5+ events) (LINK)
- Landscape Photography (LINK)
- Drone Photography (LINK)
- Guitar basics focused on the rhythm guitar (LINK)
- Awarded the Visionary Graduate Engineering Trainee (GET) award at Alstom Transport which recognised my planning and scheduling skills.
- Head of a technical student club during my Bachelors study called the Indian Society for Technical Education (ISTE-NITK).
- During my Bachelor's study, regularly volunteered to help underprivileged students in Indian government schools with their 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