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ABOUT ME

I am a graduate Artificial Intelligence (AI) Engineer from the University of Groningen. I am a motivated, talented, hardworking, and fast-learning professional. I am interested in a role in the field of AI with a long-term goal of contributing towards improving the various aspects of human lives and the environment through continuous development and deployment AI applications that can have significant impact on the real-world. My hobbies are playing chess and badminton, listening to music, watching technology videos, and going for walks.

EDUCATION

- **M.Sc. in Artificial Intelligence** Groningen, The Netherlands
University of Groningen [RUG] Sep 2021 - Oct 2023
 - **Thesis:** For my AI Master's thesis I worked on a research project titled **Enhancing depth estimation for Transparent objects**. In this research, we proposed a novel encoder-decoder architecture that outperformed the state-of-the-art method.
 - **Relevant Courses:** Machine Learning, Deep Learning, Pattern Recognition, Handwriting Recognition, Cognitive Robotics, Robotics for AI, Computer Vision, Natural Language Processing, Deep Reinforcement Learning, Intro to Data Science.
 - **Grades:** GPA: 8.3/10, Thesis: 8.5/10
- **Honours Master's in High Tech Systems and Materials (HTSM)** Groningen, The Netherlands
Honours College, University of Groningen Nov 2021 - Jun 2023
 - **Grade:** GPA: 7.9/10
- **B.Tech. in Information Technology** Surathkal, Mangaluru, India
National Institute of Technology Karnataka [NITK] Jul 2012 - May 2016
 - **Grade:** CGPA: 8.3/10

EXPERIENCE

- **Teaching Assistant (Part-time)** Groningen, The Netherlands
Faculty of Science and Engineering (FSE), University of Groningen May 2023 - Jun 2023
 - **Responsibilities:** I worked as a TA for *Handwriting Recognition* course during which I monitored the weekly lab sessions, mentored some teams regarding their progress in the course project and graded the course projects.
 - **Skills:** Teamwork, Teaching, Time management, Communication, Python.
- **Teaching Assistant (Part-time)** Groningen, The Netherlands
Faculty of Science and Engineering (FSE), University of Groningen Feb 2023 - Apr 2023
 - **Responsibilities:** I worked as a TA for *Deep Learning* and *Computer Vision* courses. I monitored the weekly lab sessions and graded assignments for both courses. I also invigilated the exam for the Deep Learning course.
 - **Skills:** Teamwork, Teaching, Time management, Communication.
- **Teaching Assistant (Part-time)** Groningen, The Netherlands
Faculty of Science and Engineering (FSE), University of Groningen Sep 2022 - Nov 2022
 - **Responsibilities:** I worked as a TA for *Cognitive Robotics* and *Introduction to Data Science* courses during which I monitored the weekly lab sessions and graded assignments for both courses. I graded the course projects for the Cognitive Robotics course. For the Introduction to Data Science course, I invigilated the course exam, gave a presentation to the students on using Git and GitLab for course assignments, and maintained the GitLab assignment repositories for the teams.
 - **Skills:** Teamwork, Teaching, Time management, Leadership, Communication, Presentation, Python, Git, GitLab.
- **Summer AI Intern** IJmuiden, The Netherlands
Tata Steel in Europe Jul 2022 - Aug 2022
 - **Responsibilities:** I took part in this summer internship as a part of the Dutch Summer of AI, edition 2022. I worked on supervised and unsupervised deep learning methods to classify and cluster images with steel surface defects. For the unsupervised task, I worked on a model as a proof of concept. For the supervised steel surface defect classification task, I worked on developing a production-ready AI model that achieved a 92% accuracy. When deployed, this model would save at least 500K Euros annually for Tata Steel. Our team won the award for **Solving the Most Valuable Problem**.

- **Skills:** Teamwork, Time management, Communication, Presentation, Python, GitLab, Microsoft Azure, MLFlow.

Teaching Assistant (Part-time)

Groningen, The Netherlands

University Medical Center Groningen (UMCG), University of Groningen

Jun 2022 - Jul 2022

- **Responsibilities:** I worked as a TA for the Summer School Data Science and AI in Health. I was responsible for making sure that the assignment notebooks did not have any issues. I monitored and helped the students during the summer school.
- **Skills:** Communication, Leadership, Time management, Python, Jupyter.

Internship (Part-time)

Drachten, The Netherlands

Philips Consumer Lifestyle B.V.

Nov 2021 - Jul 2022

- **Responsibilities:** For this internship, I worked as a part of an Honours Master's in HTSM. I was in a team in which we worked on a **report outlining different ways of developing a sustainable shaver by reducing the carbon footprint of one of the Philips shaver models**. We presented the top 5 ways of reducing the carbon footprint of the shaver. When some of our proposals are implemented, the carbon footprint of the shaver can be reduced by 16.6% to 35% depending on the choice.
- **Skills:** Teamwork, Time management, Communication, Presentation.

Research Associate (Machine Learning) in Autonomy

Bengaluru, India

Ati Motors

Sep 2017 - Jun 2021

- **Responsibilities:** I worked on research, prototyping, development, and deployment of Machine Learning, Deep Learning, Computer Vision, Robot Perception, and miscellaneous Algorithm solutions for autonomous cargo vehicles. In the learning algorithms, I worked mostly on object classification, object detection, and semantic segmentation in 2D images; and semantic segmentation in 3D LiDAR point cloud data. I also worked on benchmarking various ML models on multiple target HW devices such as Nvidia's GPUs, Intel Movidius stick, and Nvidia Xavier embedded development board. I worked on the development, deployment, and testing of various LiDAR and camera sensor drivers, and raw and derived sensor data pipelines. I was actively involved in showcasing more than 15 demos at potential customer sites and successful deployment activities at 3 customer sites.
- **Skills:** Communication, Teamwork, Time management, Leadership, Linux, Docker, Git, GitHub, Python, Jupyter, Streamlit, Flask, PyTorch, TensorFlow, TensorRT, Pandas, Scikit-learn, Scipy, OpenCV, C++, C.

PROJECTS

- **Projects:** All the projects are available in my GitHub profile <https://github.com/AbhishekRS4/>.

SKILLS

- **Soft Skills:** Teamwork, Time management, Communication, Leadership, Presentation, Teaching
- **Programming languages:** Python, C++, C, Java, Matlab
- **Version control (CI/CD):** Git, GitHub, GitLab
- **Frameworks and Packages:** Numpy, Scipy, Pandas, Matplotlib, Scikit, OpenCV, TensorFlow, PyTorch, Streamlit, Flask, FastAPI, etc.
- **Miscellaneous Tech:** Linux, SQLite, MySQL, Docker, MLFlow, HuggingFace, Microsoft Azure, AWS
- **Languages:** English (professional), Dutch (elementary), Kannada (native), Hindi (professional)

NOTABLE AWARDS AND ACHIEVEMENTS

Natural Language Processing course

Groningen, The Netherlands

2022-2023

- **GroNLP:** One of the best student project awards for the year 2022-2023 in the NLP course at the University of Groningen, for the inflection relearning project.

Dutch Summer of AI, edition 2022

Amsterdam, The Netherlands

2021-2022

- **Summer AI Intern at Tata Steel in Europe:** Our team won the award for Solving the Most Valuable Problem, among 9 participating teams at the Dutch Summer of AI, edition 2022.

Beta Business Days, edition 2022

Groningen, The Netherlands

2021-2022

- **B & S case study - Text recognition challenge:** Won the best solution award by developing a web application solution using the Azure cognitive services API.

Acute Myeloid Leukemia Prediction Challenge

Groningen, The Netherlands

2021-2022

- **Acute Myeloid Leukemia Prediction Challenge:** Our team won the 2nd best performer award in the Acute Myeloid Leukemia Prediction Challenge conducted as part of the Introduction to Data Science Master's course at the University of Groningen