



## “Abhishek” Ramanathapura Satyanarayana

### About Me

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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 of AI applications that can have a significant impact on the real world.

### Education

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- **Sep 2021 - Oct 2023**  
**M.Sc. in Artificial Intelligence**  
University of Groningen, Groningen, The Netherlands
  - **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.
  - **Grade:** GPA: 8.3/10, Thesis: 8.5/10
- **Nov 2021 - Jun 2023**  
**Honours Master's in High Tech Systems and Materials (HTSM)**  
University of Groningen, Groningen, The Netherlands
  - **Masterwork:** For my HTSM Masterwork, I worked on a research project titled **Oil Spill Segmentation using Deep Encoder-Decoder models**. In this project, we developed and evaluated the performance of popular deep encoder-decoder models for the oil spill segmentation task. The best-performing model has also been deployed to HuggingFace.
  - **Grade:** GPA: 7.9/10, Masterwork: 9/10
- **July 2012 - May 2016**  
**B.Tech. in Information Technology**  
National Institute of Technology Karnataka [NITK], Surathkal, Mangaluru, India
  - **Grade:** CGPA: 8.3/10

### Experience

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- **May 2023 - Jun 2023**  
**Teaching Assistant (Part-time)**  
Faculty of Science and Engineering (FSE), University of Groningen
  - **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.
- **Feb 2023 - Apr 2023**  
**Teaching Assistant (Part-time)**  
Faculty of Science and Engineering (FSE), University of Groningen
  - **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, Python, Matlab.

### Contact

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#### Phone

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#### Email

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#### Location

Groningen, The Netherlands (willing to relocate)

### Profiles

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<https://github.com/AbhishekRS4/>

<https://huggingface.co/abhishekr4>

<https://abhishekr4.github.io/>

<https://linkedin.com/in/abhishek-r-s/>

### Core Skills

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- Programming
- Continuous Integration / Continuous Deployment
- Machine Learning
- Deep Learning
- Computer Vision
- Data Pipeline and ETL
- MLOps
- Model Evaluation
- Containerization and Model Deployment
- Data Science
- Natural Language Processing

### Awards

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- One of the best student project awards in NLP course - University of Groningen
- Solving the most valuable problem award - Dutch Summer of AI
- Second best performer student project award in Introduction to Data Science course - University of Groningen

## Tech Skills

- **Programming Languages**
  - Python
  - C++
  - C
  - Matlab
- **Version Control (CI / CD)**
  - Git
  - GitHub
  - GitLab
- **Frameworks**
  - Numpy
  - Pandas
  - Scipy
  - Scikit
  - Matplotlib
  - PyTorch
  - TensorFlow
  - OpenCV
  - Streamlit
  - FastAPI
  - Flask
- **Miscellaneous Tech**
  - Linux
  - Docker
  - Kubernetes
  - MLFlow
  - Weights and Biases
  - HuggingFace
  - TensorRT
  - Microsoft Azure
  - AWS
  - Prefect
  - SQL
  - MySQL

## Languages

- **English (professional)**
- **Dutch (beginner)**
- **Kannada (native)**
- **Hindi (professional)**

## Soft Skills

- **Teamwork**
- **Time management**
- **Communication**
- **Leadership**
- **Presentation**
- **Teaching**

## Hobbies

- **Badminton**
- **Chess**
- **Watching technology videos**
- **Listening to music**
- **Going for walks**

### ○ Sep 2022 - Nov 2022

#### Teaching Assistant (Part-time)

Faculty of Science and Engineering (FSE), University of Groningen

- **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.

### ○ Jul 2022 - Aug 2022

#### Summer AI Intern

Tata Steel in Europe, IJmuiden, The Netherlands

- **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 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.

### ○ Jun 2022 - Jul 2022

#### Teaching Assistant (Part-time)

University Medical Center Groningen (UMCG), University of Groningen

- **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.

### ○ Nov 2021 - Jul 2022

#### Internship (Part-time)

Philips Consumer Lifestyle B.V., Drachten, The Netherlands

- **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.

### ○ Sep 2017 - Jun 2021

#### Research Associate (Machine Learning) in Autonomy

Ati Motors, Bengaluru, India

- **Responsibilities:** I worked mostly 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 hardware devices such as Nvidia's GPUs, Intel Movidius stick, and Nvidia Xavier embedded development board. I also worked on the development, deployment, and testing of LiDAR and camera sensor drivers, and raw and derived sensor data pipelines. I was also actively involved in support operations such as 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.