

## Contact

#### **Phone**

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#### **Email**

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#### Location

Groningen, The Netherlands (willing to relocate)

## **Profiles**

https://github.com/AbhishekRS4/

https://huggingface.co/abhishekrs4

https://abhishekrs4.github.io/

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

## **Core Skills**

- 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**

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

## "Abhi"shek Ramanathapura Satyanarayana

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

## **Education**

### O Sep 2021 - Oct 2023

### M.Sc. in Artificial Intelligence

University of Groningen, Groningen, The Netherlands

- Thesis: For my Al 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

## O 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

#### O July 2012 - May 2016

#### **B.Tech. in Information Technology**

National Institute of Technology Karnataka [NITK], Surathkal, Mangaluru, India

• Grade: CGPA: 8.3/10

# **Experience**

#### O 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.

## **Tech Skills**

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

# 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

### O 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.

#### O Jul 2022 - Aug 2022

#### **Summer Al 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.

#### O 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.