

Abhishek Ramanathapura Satyanarayana

Groningen, the Netherlands



RESEARCH INTERESTS

- Artificial Intelligence, Machine Learning, Deep Learning, Computer Vision, Robot Perception

EDUCATION

- **University of Groningen [RUG]** Groningen, The Netherlands
M.Sc. in Artificial Intelligence Sep 2021 - present
- **National Institute of Technology Karnataka [NITK]** Surathkal, Mangaluru, India
B.Tech. in Information Technology, CGPA: 8.3/10 Jul 2012 - May 2016

EXPERIENCE

- **FSE, University of Groningen** Groningen, The Netherlands
Teaching Assistant (Part-time) Feb 2023 - Apr 2023
 - **Teaching Assistant (TA):** Part-time work as a TA for *Deep Learning* and *Computer Vision* courses offered by Faculty of Science of Engineering (FSE), University of Groningen.
- **FSE, University of Groningen** Groningen, The Netherlands
Teaching Assistant (Part-time) Sep 2022 - Nov 2022
 - **Teaching Assistant (TA):** Part-time work as a TA for *Cognitive Robotics* and *Introduction to Data Science* courses offered by Faculty of Science of Engineering (FSE), University of Groningen.
- **Tata Steel in Europe** IJmuiden, The Netherlands
Summer AI Intern Jul 2022 - Aug 2022
 - **Dutch Summer of AI:** This summer internship was a part of the Dutch Summer of AI, edition 2022. Our team won the award for Solving the Most Valuable Problem.
 - **Internship work:** Worked on supervised and unsupervised deep learning methods to classify and cluster images with steel surface defects.
- **UMCG** Groningen, The Netherlands
Teaching Assistant (Part-time) Jun 2022 - Jul 2022
 - **Summer School Data Science and AI in Health:** Part-time work as a Teaching Assistant during the Summer School, edition 2022.
- **Ati Motors** Bengaluru, India
Research Associate (Machine Learning) in Autonomy Sep 2017 - Jun 2021
 - **Machine learning:** Worked on research, prototype, development, and deployment of Machine Learning, Deep Learning, Computer Vision, Robot Perception, and Algorithm solutions for autonomous cargo vehicles. This involved using the LiDAR and multi-modal camera data (i.e. RGBD) for developing various ML pipelines with a focus on object classification in 2D images, object detection in 2D images, semantic segmentation in 2D images, and semantic segmentation in 3D LiDAR point cloud data.
 - **HW benchmarking:** Benchmarking of various ML models that were developed on multiple HW devices such as Nvidia's server GPUs, Intel Movidius stick, and Nvidia Xavier embedded development board.
 - **Sensor drivers:** Active involvement in prototype, development, deployment, and testing of various LiDAR and camera sensor drivers (including multi-modal i.e. RGBD camera).

- **Sensor data pipelines:** Active involvement in development, deployment, and testing of various raw and derived sensor data pipelines.
- **Testing:** Active involvement in testing various algorithm pipelines on prototype and production vehicles.
- **Demos and deployment:** Active involvement in multiple potential customer demos and successful customer deployment activities at customer sites. This includes Ati's successful first and further customer deployments.

• Indian Institute of Science

Bengaluru, India

Project Assistant Intern at HPC Lab in SERC

Jun 2016 - Dec 2016

- **Professor guide:** Prof. R Govindarajan
- **Parallel programming:** Worked on implementation and benchmarking of data parallel algorithms to achieve high performance on hardware accelerators using APIs - CUDA C, OpenCL, OpenMP.

• J P Morgan Chase

Mumbai, India

Technology Analyst Intern in Investment Banking

May 2015 - Jul 2015

- **Data analysis:** Worked on data analysis of real-time transaction data.

PROGRAMMING LANGUAGES AND TECH SKILLS

- **Programming languages:** Python, C, C++, Java, Matlab
- **Database:** SQLite, MySQL
- **Version control:** Git

SELF LEARNING COURSES

- Machine Learning, Coursera (Certification)
- Mathematics for Machine Learning Specialization, Coursera (Certification)
- Deep Learning Specialization, Coursera (Certification)
- Applied Data Science Specialization, Coursera (Certification)
- Python for Everybody Specialization, Coursera (Certification)
- Robotics - Perception, Coursera (Certification)
- An Intuitive Introduction to Probability, Coursera (Certification)
- Data Science Math Skills, Coursera (Certification)
- Fibonacci Numbers and Golden Ration, Coursera (Certification)
- Parallel Programming and Optimization for Intel Architectures, Colfax Research (Certification)

NOTABLE AWARDS AND ACHIEVEMENTS

- **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 cognitive services API offered by Azure.
- **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

EXTRA CURRICULAR ACTIVITIES

- **IMTEX FORMING 2020 held at BIEC** Bengaluru, India
Jan 2020
Represented Ati Motors
- **Poster session held at Indian Institute of Science** Bengaluru, India
Jul 2019
Represented Ati Motors
- **Incident-16 (cultural festival of NITK)** Surathkal, Mangaluru, India
Mar 2016
Team member that conducted the Gaming events of Incident-16
- **TECHeshi's castle at NITK IEEE tech festival** Surathkal, Mangaluru, India
Dec 2012 - Jan 2013
Team member that conducted the event

REFERENCES

- Dr. Geetha V
Assistant Professor
Department of Information Technology
National Institute of Technology Karnataka, India
Email: geethav@nitk.edu.in
Website: <https://infotech.nitk.ac.in/faculty/geetha-v>
- Dr. Jaidhar C D
Associate Professor
Department of Information Technology
National Institute of Technology Karnataka, India
Email: jaidhared@nitk.edu.in
Website: <https://infotech.nitk.ac.in/faculty/jaidhar-c-d>