Jozsef Gergely Hornyak

Personal Profile & Motivation

With a strong foundation in programming languages such as Python, C++, and JavaScript, I have successfully completed a "year-in-industry" internship at GE Vernova, and I am currently seeking a Graduate Job opportunity in the field of software development, computer vision and artificial intelligence.

Work Experiences

Software Engineer Intern - GE Vernova (Cambridge, UK)

July 2023 - June 2024

- Continuous software maintenance using version control, agile methodologies to ensure legacy products are functioning properly for the world-wide customers,
- Keeping the open-source software library up-to-date with systematic approach to work,
- Security automation project initiatives achieved with proactive communication to contribute to security team duties.
- Practising Scrum agile framework and collaboration talent to work towards the team's goal.

I have gained industry-relevant work experience while being employed in a corporate enterprise over a year. Obtained broad learning opportunities, as I have received many online and on-site training on technical and fundamental materials. Moreover, I evolved in career-related decision-making and gained social skills such as presentation, time management and verbal communication. One of the key aspects of the role was being part of actual large-scale projects, and being exposed to industrial issues in computing.

Student Proctor (Lecture Support) - Coventry University (Coventry, UK)

September 2022 - April 2023

- Attending lectures and assisting students, to support lecturers,
- Contributing to learning materials by active listening and sharing useful resources.

Educations & Qualifications

<u>Integrated</u> Master of Science in Computer Science - Coventry University (Coventry, UK) September 2020 - July 2025

- I highlight Software Engineering, Advanced Algorithms, Computer Vision, Parallel Programming with GPUs, and Machine Learning modules as my preferred subjects and areas,
- Took part in multiple activity led learning projects, including the creation of a chatbot in Python using web scraping, and a random map generator in a text based C++ adventure game,
- My bachelor dissertation project was "Path Planning Improvement Using LIDAR" on Formula Student AI car,
- My masters dissertation project is "Test suite development for a scientific program",
- I am expecting a Masters First-Class Honours Degree by July, 2025.

Radnoti Miklos Secondary Grammar School (Hungary)

2015 - 2020

- GCSE equivalent in Hungary (Matura),
- A-levels equivalent Mathematics, IT, and English.

Project Experiences

Team member - Coventry University FSAI project

October 2022 - July 2023

- Coventry University participates in the Formula Student UK educational challenge, organized by IMechE,
- I have been involved in project-organising with peer members as a teamwork,
- Carried out sensor analysis to determine current state using critical thinking,
- Installing LiDAR sensor a core technology for Automated Driving Systems on Formula Student AI car,
- Presenting feasible path planning improvements to enhance the car's performance on the racetrack.

Voluntary work - Application development (Online)

January 2025 - Ongoing

- Making use of problem-solving skills when planning and designing user-friendly interface.
- Utilising latest softwares like Docker, Apache2 server and Github,
- Created online web application inspired by askUs (from D.S Apps).

Key Participant - Collaborative Online International Learning (COIL) project

December 2021

- Machine Learning using scikit-learn, pandas (Python) modules in Jupyter,
- Teaching, testing and fitting models,
- Evaluating outcomes from non-similar models with different artificial neural network structures,
- Visiting the university peering in the project in Aveiro, Portugal as university ambassadors.

Additional skills

- Languages: Hungarian (native), English (fluent), German and Spanish (beginner),
- Full Driving licence.

Hobbies & Interests

- Gym, squash, cycling, travelling, sightseeing, video games, movies, music,
- Beginner 3D modelling skills and expertise in Blender software.

Occasional voluntary work - Racehorse Rescue Centre (Carlisle, UK)

2016 - Ongoing

Stables maintenance, taking care of retired racehorses.