Ignat Georgiev 🤖

Research Engineer | Robotics & Machine Learning

Young professional with a passion for Robotics and ML on a mission to bring intelligent Star-Wars-like one step closer to reality. I love taking ideas from research to production. My strength is that I am an excellent robotics programmer, ML engineer, proven team leader and successful project manager. I am eager to work on bleeding-edge innovative products and contribute to team success through my unique skill set, hands-on experience, and drive.

Work Experience

Robotics Engineer

Kopernikus Automotive, Germany
August 2020 - Nov 2021

✓ Worked on autonomous valet parking product with deep learning CV and Rust
✓ Developed, tested and deployed a planning and control system based on random sampling and numerical optimization
✓ Successfully led a project to integrate with 5 OEMs and demo product

Founder & AI Team Lead

Edinburgh University Formula Student, UK
September 2017 - June 2020

✓ Founded and led a student project to develop an autonomous racecar
✓ The team won 2 international competitions and raised a budget of over £70,000
✓ Architected and led the development of the AV stack with ROS / C++ / Python
✓ Involved in development of DL camera and lidar object detection, multi-sensor EKF, particle filter SLAM, elastic band path planning, model predictive control, functional safety, software integration, CI/CD, and a custom simulation
✓ Worked on end-to-end autonomous driving from camera images with DRL

Research Engineer

Roborace, UK
June 2019 - April 2020

✓ Worked on developing a reference autonomous racing software stack
✓ Developed path planning and ML motion control algorithms with C++ and CUDA

Education

MSc Robotics and Artificial Intelligence

The University of Edinburgh, UK
2015 - 2020

✓ First-Class Honours (4.0 GPA)
✓ Focus on linear algebra, probability, robotics, machine learning, reinforcement learning, and optimal control
✓ Thesis: Adaptive Motion Control for Autonomous Racing using Reinforcement Learning under Prof Michael Mistry. Published as a research paper at Conference of Robot Learning 2020.

Contact Details

Phone: +49 1632 125926

Email: ignat@imgeorgiev.com

Website: imgeorgiev.com

LinkedIn: imgeorgiev

GitLab: imgeorgiev

Technical skills

C++ (11/14/17)

Rust

Python

PyTorch

CUDA

ROS & ROS2

Unix / Linux / bash

Git / Gitlab CI / Jenkins

Robot simulators

Algorithms & Structures

Distributed & Concurrent systems

Data Science & Visualization

Professional Skills

Analytical thinking

Teamwork

Project Management

Leadership

Honours & Awards

Inspirational Graduate

Best Robotics Thesis

Student Employee of the Year