

# Ignat Georgiev

## Robotician | Machine Learning | Motion Control

Young professional with a passion for Robotics and AI, interested in the intersection between science & engineering. Eager to contribute to team success through my unique skill set, agility and drive. Effective in roles combining cutting-edge research, engineering and project management.

## Work Experience

### Robotics Engineer

*Kopernikus Automotive, Germany*

August 2020 - Present

Developing an autonomous valet parking solution in a dynamic team using Rust. Working on sampling-based path planning combined with numerical optimization as well as motion control, environment modelling and behaviour prediction. Successfully led a project to autonomously park 5 different OEM vehicles.

### Founder & Team Lead

*Edinburgh University Formula Student, UK*

September 2017 - June 2020

Established a student project to develop an autonomous racecar; led a passionate team of 60 students to 2 victories at an international competition, and have raised a budget of over £70,000. Designed the autonomous driving stack consisting of camera and lidar-based object detection, multi-sensor state estimation, SLAM and model predictive control based on numerical optimization.

### Software Engineer Intern

*Roborace, UK*

June 2019 - September 2019

Worked on autonomous driving software including motion planning, software integration and deployment.

## Education

### MSc Robotics and AI

*The University of Edinburgh, UK*

2015 - 2020

- First-Class Honours (3.7+ GPA)
- Focus on robotics, machine learning, and motion control. Exposure to RL, physics, and electronics.
- Thesis: Adaptive Motion Control for Autonomous Racing using reinforcement learning and model adaption. Published as a research paper at Conference of Robot Learning 2020.

## Contact Details

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GitHub: [imgeorgiev](https://github.com/imgeorgiev)

## Technical skills

C++ (11/14/17)

Rust

Python

CUDA

ROS

Concurrent programming

Robot simulators

PyTorch

Operating Systems / Unix

CI / CD / git / bash

## Professional Skills

Critical thinking

Project Management

Teamwork

Leadership

## Honours & Awards

Inspirational graduate 2020

Best robotics thesis 2019

Student employee of the year 2018