

# Zoltán Hanesz

hanesz.zoltan@gmail.com | linkedin.com/in/zoltan-hanesz

## EDUCATION

### IMPERIAL COLLEGE LONDON | UNIVERSITY

2017-2021 | London, UK

- Master's degree in Computer Science - on track to graduate with **First-Class Honours**
- **Teaching Assistant** for undergraduate students at the Department of Computing

## WORK EXPERIENCE

### AMAZON | SOFTWARE ENGINEERING INTERN

May 2020 – October 2020 | London, UK

- Role: **AWS Software Engineering** | Tech stack: **Java, Ruby, AWS (EC2, Lambda, ELB, CloudWatch)**
- Contributed to a large-scale project for automating the migration of Layer 7 load balancers.
- Reduced the number of days required for a migration by **24 days** by implementing an automated tool to monitor all resources created during a migration.

### STARLEAF | SOFTWARE ENGINEERING INTERN

July 2019 – October 2019 | Watford, UK

- Role: **Video encoding & live streaming** | Tech stack: **C/C++, Python, Javascript, FFmpeg, AWS S3**
- Integrated the open-source FFmpeg library into the company's video conferencing framework.
- Enabled holding large-scale conferences by implementing features to **record** and **live stream** video conferences in MPEG-DASH.

### SLI.DO | SOFTWARE ENGINEERING INTERN

July 2018 – October 2018 | Bratislava, Slovakia

- Role: **Back-End Engineering** | Tech stack: **NodeJs, Typescript, MySQL, AWS**
- Built API support for features providing corporate customers advanced capabilities in their account.
- Implemented tools to identify vulnerabilities in third-party dependencies used by the app back-end.

## RELEVANT PROJECTS

### META-LEARNING PATH PLANNING NEURAL NETWORKS | MASTER'S THESIS

- Developed a machine learning-based solution for path planning in high-dimensional continuous spaces using Model-Agnostic Meta-Learning.
- Significantly reduced the path length and improved the collision rate by 5% compared to state-of-the-art.
- Tech stack: **Python, Tensorflow**

### DISTRIBUTED CACHING FOR QUANTITATIVE CONSTRAINT SOLVERS | UNIVERSITY PROJECT

- Distributed system for quantitative constraint solvers developed at Imperial College, which supports scalability, caching, and persistence, while being optimised for performance.
- Tech stack: **Kubernetes, Java, Flatbuffers, gRPC, PostgreSQL, Redis**

### ROBOCUP COSPACE RESCUE | ROBOTICS COMPETITION April 2017 – August 2017 | Nagoya, Japan

- Performing various tasks using a robot running in a virtual simulation.
- Obstacle avoidance; localising objects of interest; finding the optimal path.
- **2nd place** - Robocup Junior World Championships | Tech stack: **Kotlin, Javascript, C**

## OTHER ACTIVITIES

- **Co-Founder** of Hack Kosice, the first **MLH hackathon** in Slovakia, which in the 2 years of its existence (2019, 2020) has built a strong community of 1000+ registered hackers.
- **Mentor** of Team Talentum, a top secondary school **robotics** team in Central Europe.
- Member of multiple organisations and initiatives aiming to popularise mathematics and computer science in secondary schools.
- Symposium on Emergent Trends in AI and Robotics - event volunteer

## INTERESTS

- **Languages:** English, French, Slovak, Hungarian
- **Fencing (7 years):** Member of the Imperial College Fencing Team; former member of the Slovak National Team
- **Ultimate Frisbee (7 years):** Coach and member of the Imperial College Ultimate team; participant at the U20 European Championships with the Slovak national team
- Other interests: Piano, Photography, Live Streaming, Podcasting, Cooking