

# Olek Osikowicz

✉ amosikowicz1@sheffield.ac.uk

🔗 [olek-osikowicz.github.io](https://olek-osikowicz.github.io)

🌐 [olek-osikowicz](#)

🎓 [Google Scholar](#)

## Education

---

**PhD** **University of Sheffield**, Computer Science

Sheffield, UK

Sept 2023 – present

- Researching testing of autonomous black-box cyber-physical systems
- Evaluating **Autonomous Driving Systems** (ADS) in simulated environments
- Developed **Multi-Fidelity Bayesian Optimization** approach for ADS testing
- Analyzed flaky ADS tests caused by simulator nondeterminism
- Supervisors: Donghwan Shin & Phil McMinn

**BSc** **University of Sheffield**, Computer Science

Sheffield, UK

Sept 2020 – June 2023

- Graduated with First-Class Honours
- Dissertation: *Autonomous Driving Systems Testing - grounded in reality test generation*

## Publications

---

**Multi-Fidelity Bayesian Optimization for Simulation-Based Autonomous Driving Systems Testing**

June 2025

**Olek Osikowicz**, Phil McMinn, Wei Xing, Donghwan Shin

*Manuscript under review at the 2025 IEEE/ACM International Conference on Automated Software Engineering (ASE 2025)*

**Empirically Evaluating Flaky Tests for Autonomous Driving Systems in Simulated Environments**

Apr 2025

**Olek Osikowicz**, Phil McMinn, Donghwan Shin

[eprints.whiterose.ac.uk/222933](https://eprints.whiterose.ac.uk/222933) [2025 IEEE/ACM International Flaky Tests Workshop \(FTW 2025\)](#)

## Teaching

---

**Software Re-Engineering** [🔗](#)

Mar 2024 – present

Supporting undergraduate and master's students in re-engineering real-world Python projects.

**Introduction to Algorithms and Data Structures** [🔗](#)

Feb 2023 – June 2023

Running tutorial sessions for first-year students, explaining the principles of modern algorithms and data structures.

## Working Experience

---

**Dover Fueling Solutions**, Summer Intern

Kraków, Poland

June 2022 – Sept 2022

- Creating and testing fault-tolerant data pipelines on Microsoft Azure.
- Worked with SQL warehouses and data lakes on the Databricks cloud platform.

## Skills

---

**Cloud Computing:** Building research computing pipelines with Docker, AWS (EC2, S3), and GCP (Cloud Run)

**Programming:** Proficient in Python; solid understanding of networking, DevOps, Git, and Linux

**Mathematics:** Strong foundation in calculus, linear algebra, and statistics

**Languages:** Native Polish speaker, proficient in English, conversational in German

## Side Projects

---

**GOA Maps** [🔗](#)

May 2024

Developed a Python-based map data processing application to generate high-quality city map posters from scratch.