

# Olek Osikowicz

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## Education

<b>PhD</b>	<b>University of Sheffield</b> , Computer Science	Sheffield, UK
	<ul style="list-style-type: none"><li>• <b>Simulation-based testing of Autonomous Driving Systems (ADS)</b></li><li>• Applied machine learning to accelerate scenario-based ADS verification</li><li>• Developed Multi-Fidelity Bayesian Optimization framework for ADS testing</li><li>• Diagnosed and reduced flaky ADS tests caused by simulator nondeterminism</li><li>• Appointed as Research Assistant facilitating international collaboration</li><li>• Contributed to open-source ADS testing frameworks and tools</li></ul>	Sept 2023 – present
<b>BSc</b>	<b>University of Sheffield</b> , Computer Science	Sheffield, UK
	<ul style="list-style-type: none"><li>• Graduated with First-Class Honours</li><li>• Dissertation: <i>Autonomous Driving Systems Testing - grounded in reality test generation</i></li></ul>	Sept 2020 – June 2023

## Publications

<b>Multi-Fidelity Bayesian Optimization for Simulation-Based Autonomous Driving Systems Testing</b>	June 2025
<i>Olek Osikowicz, Phil McMinn, Wei Xing, Donghwan Shin</i>	
<i>Manuscript under review at the 2026 IEEE Intelligent Vehicles Symposium (IV 2026)</i>	
<b>Empirically Evaluating Flaky Tests for Autonomous Driving Systems in Simulated Environments</b>	Apr 2025
<i>Olek Osikowicz, Phil McMinn, Donghwan Shin</i>	
<i>eprints.whiterose.ac.uk/222933 ↗ 2025 IEEE/ACM International Flaky Tests Workshop (FTW 2025)</i>	

## Teaching

<b>Software Re-Engineering</b> ↗	Mar 2024 – present
Supporting undergraduate and master's students in re-engineering real-world Python projects.	
<b>Introduction to Algorithms and Data Structures</b> ↗	Feb 2023 – June 2023
Running tutorial sessions for first-year students, explaining the principles of modern algorithms and data structures.	

## Working Experience

<b>Dover Fueling Solutions</b> , Summer Intern	Kraków, Poland
<ul style="list-style-type: none"><li>• Creating and testing fault-tolerant data pipelines on Microsoft Azure.</li><li>• Worked with SQL warehouses and data lakes on the Databricks cloud platform.</li></ul>	June 2022 – Sept 2022

## Skills

<b>Cloud Computing:</b> Building research computing pipelines with Docker, AWS (EC2, S3), and GCP (Cloud Run)
<b>Programming:</b> Proficient in Python; solid understanding of networking, DevOps, Git, and Linux
<b>Mathematics:</b> Strong foundation in calculus, linear algebra, and statistics
<b>Languages:</b> Polish (native), English (proficient), German (conversational)