Attila Ficsor

Computer scientist · PhD Student

Budapest, Hungary 🏠
ficsor@mit.bme.hu ✉
nagilooh.github.io 🌐
nagilooh
attilaficsor
0000-0002-0541-4590

🎓 Education

2022–   **Computer Science PhD**, *Budapest University of Technology and Economics*
Research topic: Testing autonomous vehicles by systematically generating traffic situation

2020–2022   **Computer Engineering MSc**, *Budapest University of Technology and Economics*
Master's thesis: Integration of a High Performance Predicate Evaluator to a Graph Generator Algorithm

2016–2020   **Computer Engineering BSc**, *Budapest University of Technology and Economics*
Bachelor's thesis: Generation of Abstract Test Scenarios for Systematic Verification of Autonomous Vehicles

🌐 Employment

2022   **Junior Software Engineer**, *IncQuery Labs cPlc.*, Budapest, HU

2021–2022   **Assistant Research Fellow**, *Budapest University of Technology and Economics*, Budapest, HU

📇 Internships

2019   **Software Engineer Intern**, *IncQuery Labs cPlc.*, Budapest, HU

💡 Skills and Interests

Research   Graph solver, Graph model generation, Autonomous Vehicle testing
Development   Java, Python, C, C++, Shell, Git, CI/CD, Unreal Engine

🅰 Languages

Hungarian   Native
English   Full Professional Proficiency

〈〉 Open Source Contributions

2020–   **Refinery** , *An efficient graph solver for generating well-formed models (refinery.services 🌐)*

📄 Selected Publications

CSCS 2022   **Semantic Robustness Testing for Vision-Based Machine Learning Components of Autonomous Cyber-Physical Systems**, <u>*A. Ficsor*</u>, The 13th Conference of PhD Students in Computer Science : Volume of Short Papers, pages 35-39, 2022

CSCS 2022   **Toolchain for the Construction of Realistic Simulated Urban Environments**, *B. Pintér,* <u>*A. Ficsor*</u>, The 13th Conference of PhD Students in Computer Science : Volume of Short Papers, pages 40-44, 2022

Minisy 2022   **An Initial Performance Analysis of Graph Predicate Evaluation over Partial Models**, <u>*A. Ficsor, O. Semeráth*</u>, Proceedings of the 29th Minisymposium of the Department of Measurement and Information Systems Budapest University of Technology and Economics, 2022

📄 Students' Scientific Conference Papers

2021 **Simulation-based robustness testing of ADAS systems**, _A. Ficsor_, _B. Pintér_, Students' Scientific Conference of the Faculty of Electrical Engineering and Informatics of the Budapest University of Technology and Economics
2nd prize

2019 **Automated generation of Test Layouts for the Systematic Verification of Autonomous Vehicles**, _A. Ficsor_, _B. Somorjai_, Students' Scientific Conference of the Faculty of Electrical Engineering and Informatics of the Budapest University of Technology and Economics
Reward

📘 Teaching

Courses Critical Systems Laboratory · Systems Engineering Laboratory 1 · Model-based Software Development · Model-based Systems Design · Software and Systems Verification