Michal Staniaszek

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Experience

DPhil Candidate at GOALS Group, Oxford Robotics Institute, University of Oxford, Oxford, UK — Oct 2022 to Present
- Researched temporal methods in MDPs, wrote code to make building and simulation of MDPs more user friendly.
- Engaged in public outreach, including operating Spot during the 2023 Royal Institution Christmas Lectures.

Robotics Software Engineer at Oxford Robotics Institute, University of Oxford, Oxford, UK — Nov 2019 to Oct 2022
- Led development of robot-agnostic autonomy system used across the institute, integrating hardware and software.
- Ran demonstrations of Spot to the public, project funders, and industry, developed risk assessments and safety tools.

Research Assistant at Vision For Robotics Group, Technische Universität Wien, Vienna, Austria — Jun 2017 to Jan 2019
- Administration of courses in computer vision and robotics, improved assignment structure and graded students.
- Reviewed literature on computer vision and mapping, evaluated performance of various state of the art algorithms.

STRANDS Project Research Associate at University of Birmingham, Birmingham, UK — Oct 2016 to May 2017
- Assisted researchers with robots through hardware and software support, network configuration, and status monitors.
- Improved usability of systems through scripting, user interfaces, and software package documentation.

Innovation Team Intern at Yujin Robot Co., Ltd, Seoul, Republic of Korea — Jul 2015 to Jan 2016
- Co-design and implementation of a software package for high-level robot control and state visualisation.
- Behaviour design, diagnostics, simulation, and module interfacing for an in-development robot.

Education

DPhil Engineering Science, Oxford Robotics Institute — Oct 2022 to Present
Keble College, University of Oxford, Oxford, UK
Research focus: *Long-Horizon Temporal Planning Under Uncertainty for Industrial Robotics*

MSc Systems, Control and Robotics, Robotics and Autonomous Systems track — Aug 2013 to Jun 2015
KTH Royal Institute of Technology, Stockholm, Sweden
Thesis: *Feature-Feature Matching for Object Retrieval in Point Clouds*

BSc (Hons) Computer Science with Study Abroad, First Class Honours — Sep 2009 to Jun 2013
University of Birmingham, Birmingham, UK
Thesis: *Time Delay Estimation in Gravitationally Lensed Photon Streams*
Study abroad: **Japanese Language Programme**, Keio University, Tokyo, Japan

Community and Civil Society

Welfare Officer for Keble College Middle Common Room — Jul 2023 to Present
- Organised welfare events for Keble's graduate community, including weekly brunch attended by over 40 people.

Presiding Officer for Oxford City Council Elections — May 2021
- Responsible for running a polling station on election day, including security of the ballot.
- Collected ballot boxes, set up the station, provided ballots to voters, answered questions about voting process.

Assistant Observer at Democracy Volunteers — May 2019 to Jan 2021
- Observed for elections in the UK, and EU, visited polling stations to record data and check compliance with regulations.
- Co-wrote a report on 2020 US election in Georgia, summarising local media, legal cases, and social media reactions.

Warehouse Volunteer at Fareshare London — Apr 2019 to Nov 2019
- Categorised and arranged incoming food in the warehouse, gathered food orders for distribution to charities.

Publications

Staniaszek, Brudermüller, Bhattacharyya, Lacerda, Hawes. *Difficulty-aware Time-Bounded Planning Under Uncertainty for Large-Scale Robot Missions.* ECMR	July 2023
Street, Lacerda, **Staniaszek**, Mühlig, Hawes. *Context-Aware Modelling for Multi-Robot Systems Under Uncertainty.* AAMAS	May 2022

Teaching

Teaching Assistant at Vision for Robotics Group, Technische Universität Wien — Jun 2017 to Jan 2019

- Administered the Masters' *Machine Vision and Cognitive Robotics* and Bachelors' *Robotics and Computer Vision* courses.
- Updated and maintained assignment content, managed tutors, graded assignments, and provided assistance to students.

Robot Programming Demonstrator at University of Birmingham — Jan 2017 to Apr 2017

- Discussed theoretical and software problems with students to help them understand the AI concepts being taught.
- Helped students work together as teams to complete assignments, and graded them based on live demonstrations.

Scholarships and Awards

Computer Science Prize & Research Committee Project Prize at University of Birmingham — Jul 2013

- School of Computer Science award for the top final year student, and best research project thesis.

Nuffield Undergraduate Research Bursary at University of Birmingham — Jul 2011

- Bursary to support a summer research project to investigate particle filter localisation for AUVs.

Programming and Software

Python, ROS, git, Linux, bash, C++, LaTeX

Public repositories at github.com/heuristicus

Languages

English (native), Japanese (good), Polish (good)
German (basic)