

EMPLOYMENT HISTORY

OCT 2022 to PRESENT	DPhil Candidate at GOALS GROUP, OXFORD ROBOTICS INSTITUTE, UNIVERSITY OF OXFORD, Oxford, UK <ul style="list-style-type: none"> Analysed methods of integrating time into planning with Markov Decision Processes (MDPs). Ran long-term deployments of Spot, including with the UK Atomic Energy Authority at the JET fusion reactor. Consulted for external companies to help them use our autonomy system in practical applications. Built more user-friendly internal tools to make building and simulation of MDPs simpler. Engaged in public outreach, including operating Spot during the 2023 Royal Institution Christmas Lectures.
Nov 2019 to OCT 2022	Robotics Software Engineer at OXFORD ROBOTICS INSTITUTE, UNIVERSITY OF OXFORD, Oxford, UK <ul style="list-style-type: none"> Lead developer on robot-agnostic autonomy system used across the institute on Spot, Scitos X3, HSR, and Jackal. Responsible for integration of hardware and software capabilities on Spot. Improved the <code>spot_ros</code> package. Refined internal Spot risk assessment and developed additional safety software and hardware with the hardware team. Ran trials and demonstrations of Spot to the public, project funders, and industry, including nuclear and construction. Assisted development on the <i>Frontier</i> mapping device, integrating onto robots and automating software setup. Created <code>procman_ros</code>, porting the existing distributed process manager package to ROS and GTK3+.
JUN 2017 to JAN 2019	Research Assistant at VISION FOR ROBOTICS GROUP, TECHNISCHE UNIVERSITÄT WIEN, Vienna, Austria <ul style="list-style-type: none"> PhD candidate and teaching assistant, working on semantic segmentation and mapping for long-term robot autonomy. Reviewed literature on 3d segmentation and SLAM, evaluated performance of various state of the art algorithms.
OCT 2016 to MAY 2017	STRANDS Project Research Associate at UNIVERSITY OF BIRMINGHAM, Birmingham, UK <ul style="list-style-type: none"> On-site support for robot deployment, assisting project partners setting up and debugging their code on the Scitos G5. General linux hardware and software support, network configuration and status monitoring. Created RViz tools and panels to display and quickly and easily modify the graph-based autonomy system. Implemented scripts for robot startup and easier creation of task routines for long-term autonomy. Improved software package documentation, scripted aggregation of documentation from all project repositories.
JUL 2015 to JAN 2016	Innovation Team Intern at YUJIN ROBOT CO., LTD, Seoul, Republic of Korea <ul style="list-style-type: none"> Co-design and implementation of the <code>py_trees</code> package and visualisation, now a popular Python behaviour tree library. Behaviour design, diagnostics, simulation layer implementation, and module interfacing in ROS for the GoCart robot. Helped with ROS integration of web interface packages for robot control using REST and Celery. Contributed to open source ROS packages <code>diagnostic_aggregator</code> and <code>audio_common</code>.

EDUCATION AND QUALIFICATIONS

OCT 2022 to PRESENT	DPhil Engineering Science , Oxford Robotics Institute KEBLE COLLEGE, UNIVERSITY OF OXFORD, Oxford, UK Research focus: <i>Long-Horizon Temporal Planning Under Uncertainty for Industrial Robotics</i>
AUG 2013 to JUN 2015	MSc Systems, Control and Robotics , Robotics and Autonomous Systems track KTH ROYAL INSTITUTE OF TECHNOLOGY, Stockholm, Sweden Thesis: <i>Feature-Feature Matching for Object Retrieval in Point Clouds</i>
SEP 2009 to JUN 2013	BSc (Hons) Computer Science with Study Abroad , First Class Honours UNIVERSITY OF BIRMINGHAM, Birmingham, UK Thesis: <i>Time Delay Estimation in Gravitationally Lensed Photon Streams</i> Study abroad: Japanese Language Programme , KEIO UNIVERSITY, Tokyo, Japan

PUBLICATIONS

JULY 2023	Staniaszek , Brudermüller, Bhattacharyya, Lacerda, Hawes. <i>Difficulty-aware Time-Bounded Planning Under Uncertainty for Large-Scale Robot Missions</i> . ECMR
MAY 2022	Street, Lacerda, Staniaszek , Mühlig, Hawes. <i>Context-Aware Modelling for Multi-Robot Systems Under Uncertainty</i> . AAMAS

TEACHING

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| JUN 2017 to
JAN 2019 | Teaching Assistant at VISION FOR ROBOTICS GROUP, TECHNISCHE UNIVERSITÄT WIEN <ul style="list-style-type: none">– Administered the Masters’ <i>Machine Vision and Cognitive Robotics</i> and Bachelors’ <i>Robotics and Computer Vision</i> courses.– Updated and maintained assignment content, managed tutors, graded assignments, and provided assistance to students. |
| JAN 2017 to
APR 2017 | Robot Programming Demonstrator at UNIVERSITY OF BIRMINGHAM <ul style="list-style-type: none">– 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. |

COMMUNITY AND CIVIL SOCIETY

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| JUL 2023 to
PRESENT | Welfare Officer for KEBLE COLLEGE MIDDLE COMMON ROOM <ul style="list-style-type: none">– Organised welfare events for Keble’s graduate community, including weekly brunch event attended by over 40 people |
| MAY 2021 | Presiding Officer for OXFORD CITY COUNCIL ELECTIONS <ul style="list-style-type: none">– 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. |
| MAY 2019 to
JAN 2021 | Assistant Observer at DEMOCRACY VOLUNTEERS <ul style="list-style-type: none">– Accredited observer for local and general elections in the UK, Belgium, Netherlands, and USA.– Attended polling stations on election day and recorded conformity with best practice for elections. |
| APR 2019 to
NOV 2019 | Warehouse Volunteer at FARESHARE LONDON <ul style="list-style-type: none">– Categorized and arranged incoming food in the warehouse, gathered food orders for distribution to charities. |

SCHOLARSHIPS AND AWARDS

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| JUL 2013 | Computer Science Prize & Research Committee Project Prize at UNIVERSITY OF BIRMINGHAM <ul style="list-style-type: none">– School of Computer Science award for the top final year student, and best research project thesis. |
| JUL 2011 | Nuffield Undergraduate Research Bursary at UNIVERSITY OF BIRMINGHAM <ul style="list-style-type: none">– 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)