

Zachary Atkinson

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Profile

A final year Robotic Engineering student studying their master's degree at the University of Bath. Passionate and inquisitive with a keen interest in learning new skills and problems solving. Confident using programs such as Word and Excel. A background in programming with a strong understanding in python with experience in employing machine learning techniques using Pytorch. Using simulation software for robot learning and control with Isaac Sim and ROS and deploying to a physical robot arm. Furthermore, developing with MATLAB, C++, and programming microcontrollers such as Arduinos and Raspberry Pis. Planning, designing and developing software in accordance to requirements both individually and as part of a team. Capable in working in a hands-on environment whilst remaining calm when an environment gets stressful. A good approach towards education along with academic ability.

Selected Work Experience:

Control Systems Engineer - Atlas Elektronik

September 2022 – September 2023

- **Python** : Developing programming knowledge through projects whilst reinforcing current programming knowledge. Version control developing code using git and Jira.
- **Unreal Engine 5** : Developing an understanding for how the Unreal 5 engine works and developing small projects in automated pathing for boats.
- **Presentations** : Delivering Mid and Full year presentations on individual project progress and completion to management, collaborating with colleagues on a Bid presentation to the Senior Leadership Team.
- **Project work** : Both independent and Collaborative project work , including automation of systems using game theory and working in teams to create search patterns.

Online shopper - Sainsbury's

June 2021-August 2021

- Supported multiple stores in ensuring complete orders for delivery in a high paced environment.

Customer Assistant - Evans Cycles

June 2019- September 2020

- Delivered excellent customer service , processed transactions and supported customers with purchases and maintenance of the bikes

Education:

University of Bath - MEng (Hons) Robotic Engineering with industrial placement

2020-2025

2:1 (Expected)

- Manager in a university business project in developing an attachable robotic exoskeleton hand to aid in piano learning. Integration of other team members software to achieve functionality of a final product.

- An individual final year project developing a Sim2Real robot using Nvidia Isaac Sim and Isaac Lab
- Reinforcement Learning: Controlling a robotic agent's arm and gripper for pick and place task.
- Machine learning: Image recognition using CNNs
- Robotic Engineering and control using ROS.
- Control systems theory.

Woking College

2018-2020

A levels : Computer Science: A* , Mathematics: A , Physics: A

EPQ : A - *Project using python and a raspberry pi to design, build and control a remote-controlled car wirelessly including documentation on how it works.*

Woking High School

2013-2018

- 10 GCSE'S including: Further Maths :A, Maths :8 , Physics :8 , English literature :7

Activities and Interests

Running

Cycling (*building and maintain bikes*)

Climbing

Video Games

Programming (*built and controlled a robot arm, using python*)

Formula 1