

EDUCATION

- **University of Essex** Oct 2023
Master of Science in Computer Science
- **University of Essex** July 2022
Bachelor of Science in Computer Science

PROJECTS

- **jipelski.github.io**
 - Developed a static website using HTML, CSS and JavaScript and hosted it using GitHub Pages
 - Used GitHub API to dynamically load repositories from my personal GitHub into my website
 - The static HTML files are created and loaded dynamically using JavaScript
 - Used EmailJS to implement message sending behaviour
- **Mobile Merger Game**
 - Developed a Java-based mobile application consisting of a merger game
 - Adhered to OOP concepts to create 5 building units, 12 friendly units, 4 enemy units, and 8 resource units, each having up to 7 levels
 - Developed and tested the front end, back end, and data loader
- **Stock Price Prediction**
 - Developed and tested 4 machine learning models using PyTorch, keras and unittest to predict stock prices based on historical data analysis
 - Trained the models on a 80% split and tested on the remaining 20%, achieving a 96% accuracy prediction in 2 models, and over 85% in the other 2
- **TurtleBot3 Autonomous Navigation**
 - Developed a PID controller in Python to ensure obstacle avoidance and right edge wall following behaviours for a TurtleBot3 running on the ROS2 operating system
 - Developed the same behaviours using fuzzy logic without the use of 3rd party libraries
 - Tested both implementations in the Gazebo simulator and in the robotics arena of the university, achieving results that met the expectations
- **Command-line Multiplayer Ball Game**
 - Developed a game hosting server with a tested capacity of 50 clients using java.net.Socket
 - Developed a client side program which connects to the existing server using the same library
 - Developed listeners for both client and server side programs to properly interpret the changes in the game

EXPERIENCE

- **Essex Food** Colchester, Essex
Catering Assistant Oct 2021 - Oct 2023
 - Single-handedly managed the coffee shop during most weekends ensuring the highest level of service was delivered
 - Trained new employees
- **KFC** Colchester, Essex
Catering Assistant Sept 2020 - Mar 2021
 - Worked in a team with other assistants to complete tasks in a timely manner
 - Adapted to work in a fast-paced environment

SKILLS

Languages: Java, Kotlin, Python, C++, C#, JavaScript, HTML, CSS, SQL (PostgreSQL, MySQL, SQLite)
Frameworks: .NET, Spring, JUnit, ROS2, React, Mockito
Software: Git, OpenVPN
Libraries: PyTorch, pandas, TensorFlow, OpenCV, scikit-learn, NumPy