Email: jipacf@gmail.com Mobile: +447342130407

### **EDUCATION**

University of Essex Oct 2023

Master of Science in Computer Science

University of Essex July 2022

Bachelor of Science in Computer Science

## Projects

### • Virtual Coffee Shop

- Developed the back-end, front-end, server, database and an API for an online coffee shop simulation
- o Designed the back-end using Java and Spring, the front-end using JavaScript, HTML, CSS and React, and a database using PostgreSQL
- Hosted all the components on a Raspberry Pi 4 model B

## • Food Recipe App

- o Developed a Kotlin-based application with dual functionality, enabling offline access using a local database and online access by connecting to a server
- Integrated a SQLite database into the app to ensure uninterrupted functionality in the absence of internet or server access
- Developed a PostgreSQL database on a remote server
- o Created a custom API using Spring for secure data fetching from the server

#### • Stock Price Prediction

- o 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

- o 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

- o Single-handedly managed the coffee shop during most weekends ensuring the highest level of service was delivered
- o 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