EVAN BYRNE

SOFTWARE ENGINEER

About Me

As a 22-year-old MSc Computer Science student with a strong undergraduate foundation, I'm seeking opportunities to start my career in December 2024 or upon completing my studies. My unique blend of research practice, programming skills, and understanding of human psychology makes me an adaptive and versatile candidate. I bring a combination of technical proficiency and human insight to every project.

Education

National College Ireland

Sep 2020 - May 2023

Bachelors of Arts (Hons) in Psychology

Dublin

Relevant Courses: Applied Statistics, Cyberpsychology, Learning and Behaviour,

Research Skills, Social Psychology, Cognitive Psychology

University College Dublin

Sep 2023 - Dec 2024

Dublin

Masters of Science in Computer Science Relevant Courses: Operating Systems, Python OOP, Java Programming,

Software Engineering, Data Analytics, Data Stuctures and Algorithms, Network Systems

Architecture and Organisation

Projects

Anseo | In Progress

ReactTS | SpringBoot | PostgreSQL | Docker | TailwindCSS | FastAPI

- Engineered a product with machine learning application that helps new entrepreneurs select ideal places to setup or move their business within New York based on their preferences
- Worked in a team of six as maintenance lead contributed to both backend and frontend operations
- Implemented real-time rental information using python scripts and PostgreSQL database through the effective use of SQL queries, and web crawling technologies and established seamless integration with a user-friendly ReactTS and TailwindCSS interface
- Containerised all parts of the project, ReactTS frontend, Spring-Boot backend and FastAPI ML api endpoints for easy deployment using **Docker**
- Deployed and hosted project on AWS using EC2 cloud service and RDS PostgreSQL database
- Integrated a Mistral LLM (large language model) on the frontend for users to freely ask questions about business and locations in New York

Euro Bikes | In Progress

ReactTS | Go | Figma | FastAPI | TailwindCSS | Gin | Pytorch | Docker

- Developed an easy to use intuitive world wide biking station predictor and route planner with a ReactTS interface Gin Go backend and FastAPI microservice for machine learning model endpoints
- Worked in a team of two to complete this project. Dividing work between figma mockups, frontend and backend operations
- Trained prediction models using **Pytorch** to inform users about bike availability trends for particular stations.
- Scraped data from open source APIs using Python scripts to gather historical data to train machine learning models on bike availability.
- Deployed application using **Hetzner** cloud services and **Coolify**.

Captain Carbon | Source Code

Java | LibGDX

- Engineered a 2D educational game targeted towards young children regarding carbon emissions using Java and LibGDX framework
- Worked in a **team** of five coordinating efforts on all aspects of the game
- Used **psychological** gamification principles to design levels and setup of the game
- Game was published in the IEEE ITSC 2024 conference for research and future use.

Work Experience

Court Hotel Tullamore Nov 2023 – Nov 2023

Waiter

- Worked in a high pressure environment as a waiter attending to banquet, wedding and breakfast duties.
- Learned to quickly **coordinate** and **communicate** with team members to give efficient service to customers.

Tesco Tullamore Nov 2021 – Feb 2022

Shop Floor Assistant

On-Site

On-Site

- Learned time management and how to balance time between my undergraduate studies and part-time work.
- Improved my communication skills working a part of a team and taking direction from management through following
 orders and talking with managers and co-workers.
- Learned the best manner to communicate and deal with different **stakeholders** in the business by talking and helping customers, co-workers and managers on a daily-basis.
- Learned how to **collaborate** and **cooperate** with co-workers in my team by managing workplace and store duties daily.

Tesco Tullamore Dec 2022 – Dec 2022

Cashier

 $On ext{-}Site$

- Returned to work as a seasonal worker whilst doing my undergraduate.
- Was trained in on cash handling and the front end of the store by handling purchases and returns for customers daily.
- Improved **communication** skills and learned how to work in a different **environment** compared to my last tenure by working as a cashier and communicating more with customers.

Tesco Tullamore

June 2023 – Sep 2023

Shop Floor Assistant

 $On ext{-}Site$

- Returned to work as a shop floor assistant again after finishing my undergraduate degree in psychology for the interim before starting my Masters degree.
- Further refined my **communication** and **time management** skills by spending time **coordinating** and **communicating** with co-workers on how best to handle duties of the shop.

Technical Skills

Languages: Python, Java, SQL, HTML5, CSS, JavaScript, Go, Typescript

Developer Tools: Postman, Git, Pytest, JUnit, Jest

Libraries/Frameworks: AWS, ReactJS, PostgreSQL, Spring Boot, NodeJS, Docker, TailwindCSS, Scikit-learn, Pytorch,

Tensorflow, ExpressJS, Pandas, Matplotlib, Vite, NextJS

Databases: Postgres, MongoDB, MySQL