Profile

Bilingual Software Engineering graduate (2:1) with a creative problem-solving mindset and strong interest in Human-Computer Interaction (HCI), accessibility, and inclusive development. Demonstrated experience in usability research, web development, databases, and DevOps, coupled with effective communication in collaborative environments. Confident with JavaScript, Node.js, PostgreSQL, React, and Agile practices. Eager to learn and contribute to innovative solutions, building an impactful tech career focused on user-centred systems and needs. Actively seeking roles in software development.

Education

**University of Portsmouth (Sep 2019 – June 2025)**
*BSc Software Engineering*: 2:1 (Awarded 2025)

**Saint Francis Xavier Sixth-Form College, London (Sep 2017 – June 2019)**

*BTEC Level 3 in Information Technology: Merit (Awarded 2019)
 A-Level French: A*

**St Mary’s Catholic High School, Croydon (Sep 2013 – Jul 2016)**

*6 GCSEs (Grades A\* – C), including Maths (B), English Language(C), and French (A\*)*

Technical Projects (University)

**Evaluating ADHD Technologies (Final Year Project)** - *UX Research / Accessibility / HCI*
Individually researched and evaluated ADHD-supportive technologies to identify productivity-enhancing features. Explored barriers in usability for neurodivergent users and provided practical design recommendations.
**Tools**: Trello, Google Forms, Hypotheses,
**Focus**: Accessibility, UX design, psychology-driven evaluation

**Skills Used**: Research, analytical thinking, problem-solving, empathy, independent work.

**Inclusive Cooking App** - *Usability Engineering/ Accessibility / HCI*
Redesigned and evaluated a cooking app for vulnerable users (ADHD, dyslexia, dyspraxia). Conducted heuristic analysis, created targeted personas, and ran think-aloud usability tests.
**Tools**: Figma, Nielsen heuristics, HTA, usability protocols
**Focus**: Neurodivergent accessibility, inclusive design

**Skills Used**: User research, critical thinking, empathy, attention to detail, communication (during usability tests).

**Recipe Web App** - *Web Development / Software Engineering Theory and Practice*
Group project to build a full-stack app with authentication, CRUD operations, and user-specific favourites.
**Tools**: React, Node.js, Express, PostgreSQL
**Focus**: REST APIs, UI/UX, database integration

**Skills Used**: Teamwork, collaboration, communication, problem-solving, agile practices.

**Solent Marine Solutions** - *Database / Admin Tools*

Solo project developing a PostegreSQL-backed system for inventory and client management tailored to marine operations. Designed the entire system from scratch: created ER diagrams, built a normalised database, and implemented complex SQL queries to manage transactional data. Delivered a user-facing admin interface with structured navigation.
**Tools**: PostgreSQL, Javascript, HTML/CSS
**Focus**: Relational DB design, complex queries, schema development, backend UX

**Skills Used**: Independent work, system design, problem-solving, attention to detail, logical reasoning.

**Library Management System** - *DevOps / Systems Improvement*

Group project to enhance an existing library management system. Assessed the current architecture and implemented improvements focused on scalability, data integrity, and maintainability. Delivered technical documentation outlining DevOps-oriented recommendations for deployment and system reliability.

**Tools**: GitHub Actions, CI/CD planning, ERDs

**Focus**: DevOps principles, infrastructure improvement, system performance

**Skills Used**: Teamwork, analytical thinking, documentation, strategic planning, problem-solving.

**Scrabble Implementation** - *Logic / Algorithms*
Solo JavaScript project replicating Scrabble logic including score validation, board mechanics, and interactive UI.
**Tools**: JavaScript
**Focus**: Logical reasoning, gamified backend logic

**Skills Used**: Logical reasoning, problem-solving, attention to detail, independent work.

**ControlCal** - *Web Development / Workout Scheduling*
Solo web development coursework project focused on creating a workout scheduling app. Implemented functionality allowing users to define workout routines with multiple sets and rest periods, including timer functionality and backend data storage.
**Tools**: JavaScript, HTML/CSS, Web Timer APIs, SQLite, Paint
**Focus**: User-defined routines, backend integration, timer logic

**Skills Used**: Independent work, problem-solving, Thinking outside the box, attention to detail.

Personal Projects

**Portfolio** - Developed a personal portfolio website to display a range of technical skills and projects.

**Tools**: VanillaJS, ExpressJS, HTML/CSS, SQLlite3

**Focus**: Being able to display skills within a “full-stack” application

**View more projects** [here](https://maelfedero.dev) !

Technical Skills

**Languages:** JavaScript, SQL, Python, French (Native), English ( Proficient)
**Frameworks/Libraries:** Node.js, Express, React.js, Next.JS
**Databases:** PostgreSQL, MySQL, MongoDB
**Tools:** Git, GitHub Actions, Docker (basic), Agile, Trello, REST APIs
**UX/Research:** Figma, Nielsen heuristics, Qualitative/Quantitative, usability testing, persona building
**Concepts:** CI/CD, HCI, accessibility, executive function, inclusive tech

Experience (selected)

**Freelance Tech Support / Admin Tasks** *(2024-2025)*
Provided informal tech support and helped neurodivergent peers organise digital systems (passwords, reminders, apps). Built and shared Notion dashboards for ADHD management.

**Sainsbury’s — Customer Service Assistant** *(2021 – 2023)*Ensured accurate order selection and timely deliveries.
Resolved logistical challenges, optimised workflow during peak hours

Passion and Interest:

Passionate about Football, Technology and mental wellbeing. I enjoy photography, chess, nature, sports, and music (piano & drums). Actively explore how creativity and logic intersect in both code and life.