MICHAEL KARAMICHALIS

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PROFILE

MSc Advanced Computer Science Student with a First-Class BSc in Computer Science. Experienced in full-stack development through projects with real-world impact. Recognised with multiple awards for outstanding academic and project impact.

EDUCATION

MSc Advanced Computer Science, *Cardiff University*   September 2025 – September 2026
Relevant modules:

- Principles of Machine Learning, Computational Linguistics - NLP, Cloud and Database Systems Security, Distributed and Cloud Computing, Applications of Machine Learning, Programming Paradigms

***BSc Computer Science**,* University of South Wales, UK   September 2022 – July 2025
Achieved: First-Class Honours
Awarded: BCS, The Chartered Institute for IT, Branch Prize for Outstanding Performance, Final Year Project of the Year Vote Winner – Student Mentoring Application
Relevant modules:

- Parallel and Concurrent Programming, Mobile Systems and Applications, Computer Networks, Data Structures and Algorithms with Object Oriented Programming, Intelligent Systems, Event Driven and GUI Programming, Team-based Software Development, Databases and Data Modelling, Secure Software Development

Cyprus High School Apolyterion, Cyprus   September 2018 – June 2021
Achieved: 18.50/20.00 – Graduated with Honours
- A-Level Equivalent Subjects: Computer Science, Mathematics, Physics and English

RELEVANT EXPERIENCE AND PROJECTS

Custom Payroll Management Application, Logistics Team in *Cyprus*   May 2025 – Present
- Designed and Developed a Next.js and FastAPI web application to digitise HR, payroll and sick leave workflows of hourly-paid employees
- Architectured database schema in PostgreSQL, following normalisation principles
- Implemented secure LAN-based access via Dockerised deployment on an internal server
- Reduced administrative workload by 15 hours per month per department

Student Mentoring Application, *University of South Wales*   September 2024 – May 2025
- Designed and Developed a React Native mobile application in collaboration with the Student Mentoring department
- Automated mentor-mentee matching, address inefficiencies and increase availability to 24/7.
- Implemented matching algorithm, user profile management, real-time messaging, authentication, push notifications, Google Gemini AI Integration
- Presented to the Vice-Chancellor, Director of Learning Services and Senior Staff.

Home Monitoring IoT System, *University of South Wales*   September 2024 – May 2025

- A monitoring system in C++ which retrieves values from Arduino Microcontroller Sensors and activates actuators.
- Designed a physical Arduino Uno circuit and integrated with C++ using the ArduSerial library.

RELEVANT SKILLS

PROGRAMMING & PARADIGMS: Experienced with multiple programming languages through projects and coursework, including C++, C#, SQL, JavaScript, Python, Swift. Skilled in multiple paradigms, such as Object Oriented Programming, Functional Programming, Concurrent Programming.

FULL-STACK DEVELOPMENT AND SYSTEM DESIGN: Skilled in developing end-to-end applications, through relational database schema design and integration, backend services to frontend interfaces.

ALGORITHMICAL THINKING AND PROBLEM SOLVING: Proficient in applying data structures and algorithms to solve computational problems efficiently, with attention to optimisation.

DEVELOPMENT PRACTICES AND TOOLS: Dexterous with modern development workflows including version control (Git/GitHub), Agile methodologies, and Project Management.

SOFTWARE DESIGN AND ARCHITECTURE: Applied Design Patterns, SOLID Principles to multiple projects, ensuring modularity, maintainability and scalability.

COMMUNICATION: Excellent verbal and written communication skills honed during BSc and MSc, as well as my roles as Student IT Advisor and Digital Mentor.

COLLABORATION: Worked as part of a team on current course to design and conduct a research practical - this included attending planning meetings, communicating over group messaging, completing tasks and feeding back on others' work to ensure a successful project and high grade achieved

ADAPTABILITY: Quick to learn and apply new technologies, as shown by completing projects in unfamiliar languages and concepts within tight academic timelines, recognised through awards.

WORK EXPERIENCE

Student IT Support Agent, *University of South Wales*　　　　　September 2024 – June 2025
- Efficiently resolved and diagnosed software and network issues
- Managed university accounts and devices through Microsoft Azure

Student Digital Mentor, *University of South Wales*　　　　　January 2023 – June 2025
- Mentored students for academic and technological advice
- Directed students to university services and resources

Soldier, *Cyprus National Guard*　　　　　July – August 2019
- Awarded the honorary rank of lance Corporal for exceptional performance and conduct

References available on request