

Aleksandra Jowita Marchewka

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EDUCATION

Swansea University, Computer Science (BSc)

- **Grade:** 2:1 with Honours

Sept 2021 - July 2025

Skinnlers' Academy Sixth Form

- **A-Levels:** Psychology (A*), Computer Science(A), Physics(B), Mathematics(C)

Sept 2019 - Sept 2021

Skinnlers' Academy

- **A-Levels:** Polish (A)

Sept 2014 - Sept 2019

- **GCSEs:** 11 GCSEs at grades 9-6, including Mathematics(8), English Language(8), English Literature(7), and Polish(A*)

PROJECTS

Dissertation Project: Emotion-Driven Interaction in Unity - Python, C#

- Researched emotion-based input frameworks for interactive game environments.
- Developed a system combining facial emotion detection, eye tracking, and speech emotion recognition to influence scene dynamics in Unity (C#).
- Integrated Python-based emotion recognition modules with Unity to enable real-time feedback and adaptive gameplay.
- Delivered a working demo; awarded 80% for the dissertation and 78% at the university project fair, praised for its technical complexity.

2D Game Development in Unity - C#, Unity Engine

- Designed and implemented a 2D game featuring physics-based mechanics and dynamic enemy behavior.
- Used C# scripting to manage player controls, collisions, and animations within the Unity environment.

Android Trivia Application - Java, Android Studio

- Built a mobile trivia game with randomised questions and scoring feedback.
- Integrated external REST APIs for dynamic content.
- Packaged and tested the APK on multiple devices with positive user feedback.

Web Forum Application - Laravel, PHP, MySQL, Docker

- Developed a full-stack forum platform with user authentication, posting, and commenting features.
- Built backend logic with Laravel and managed data using MySQL.
- Containerised the application using Docker for consistent local development and easy deployment.
- Resulted in a fully functional prototype with admin and moderation capabilities.

Object Recognition with CIFAR-100 Dataset - Java

- Created an image recognition pipeline achieving >70% accuracy, gaining practical experience with Java and computer vision techniques.

2D Jewel Chase-Inspired Game - JavaFX, Team Project

- Worked in a team of 4 to build a 2D desktop game with animations, scoring, and smooth UX; used Git for effective version control and collaboration.

TECHNICAL SKILLS

- Software Development in: Python, Java, C, C++, C#
- Web Development: HTML/CSS/JavaScript, Laravel
- Game Development: Unity
- Android Development: Kotlin
- Version Control (Git)
- Machine Learning
- Database Systems (MySQL/SQL)

WORK EXPERIENCE

UKME, Seasonal Housekeeper

July - August 2023 & June - August 2024

- Effectively managed time and resources to complete tasks efficiently, such as cleaning multiple rooms within a set timeframe.
- Ensuring rooms are spotless, paying close attention to detail in cleaning and organisation.
- Adjusting to different types of rooms, cleaning challenges, and client needs.
- Communicating with clients, colleagues, and supervisors about needs and issues.

ADDITIONAL INFORMATION

- **Languages:** Polish.
- **IT:** Fully competent in MS Word, Powerpoint and Outlook, Proficient in MS Excel
- **Location:** Open to work in Kraków or Warsaw, Poland; currently based in London.