

ALIN GABRIEL MICAN

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EDUCATION

Royal Holloway, University of London

Bachelor of Science in Computer Science, Upper Second Class Honours (2:1)

England, Egham

Sep 2020 - Jun 2023

Preston Manor Sixth Form

A-Level: Mathematics (A), Chemistry (A) and Computer Science (B)

England, Wembley

Sep 2018 - Jun 2020

EXPERIENCE

Freelance

Web Developer

England, London

Jun 2023 - Aug 2023

- Seized the opportunity to elevate expertise in web development, honing skills in both back-end and front-end development.
- Demonstrated innovation by incorporating bespoke animations and making API calls to enrich the overall user experience.
- Retained exceptional client engagement by proactively arranging meetings to gain deep insights into specific requirements, fostering a collaborative partnership that consistently met expectations and strategically planned for future sprint cycles.
- Achieved robust version control by employing Git, resulting in the maintenance of a clean and organized codebase throughout the development cycle.
- Successfully implemented industry-standard security practices, including the strategic utilization of environment files to conceal sensitive API keys, thereby fortifying the website against potential threats, proactively monitoring for vulnerabilities, and ensuring prompt updates for sustained security

Preston Manor Sixth Form

GCSE Maths Tutor

England, London

Sep 2018 - Jul 2019

- Effectively led educational workshops for younger students, employing communication methods to engage and inspire learning.
- Adapted to varying student capabilities, tailoring teaching approaches to meet each individual's unique needs and ensuring a well-customized learning experience.
- Established an organized workspace that catered to individual student requirements, fostering an interactive and engaging atmosphere that actively encouraged students to participate in the learning process.

PROJECTS - [GITHUB\(HTTPS://GITHUB.COM/ALINMICAN1\)](https://github.com/AlinMican1)

Robotics EV3 *Java, Lejos*

As team leader, I strategically harnessed the diverse programming strengths of our team, achieving a remarkable 96% error-free rate in color detection and sorting, through optimised algorithms and rigorous testing. In addition to also optimising pathing through coordinate-based algorithms to boost our robots movement around a hypothetical warehouse by 20%. Developing an autonomous robotic system specializing in color-based item recognition, retrieval, and precise sorting into predefined destinations.

Calculator *Java, JavaFX, JUNIT, SVN, UML, Javadoc*

Developed a calculator application using Object Oriented programming (OOP) principles, that employed both 'Reverse Polish Notation' (RPN) and 'Infix Notation' for evaluating mathematical expressions input by users. Over 50+ JUNIT test cases was implemented to check extreme boundaries and logics to ensure accuracy and effectiveness of several algorithmic approaches such shunting-yard algorithm and stack algorithms.

RogueShooter *C#, Unity, Blender, GitLab, ShaderLab*

A year-long project that encompassed 2500+ lines of code, focused on developing a rogue-like shooter game with a card-based content unlocking system. Employed highly optimized algorithms, including A* pathfinding, object pooling, and 2D occlusion culling, resulting in a remarkable 40% increase in FPS, substantially enhancing late-game user satisfaction.

Noodle-App *JavaScript, React, Github, CSS, GraphQL, Prisma, Next.JS, Node.JS, TypeScript*

A collaborative web development project with a primary goal of improving student time management through an interactive GUI. I oversaw the integration of a robust backend system utilizing Prisma and GraphQL, facilitating educators in the seamless creation, assignment, and management of course modules for students.

In addition, we strictly adhered to database normalization standards, achieving third normal form (3NF), resulting in a 35% reduction in data redundancy and ensuring enhanced stability when accommodating changes.

CORE SKILLS

Programming Tech: Java, Python, HTML, CSS, SQL, C#, JavaScript, React, NextJs, Prisma.
Languages: Romanian, English