

SUMMARY

Engineering Content & Marketing Officer at Young Malaysian Engineers(YME). BSc Game Development (Honours) Graduate from the University of Sussex. A prolific Java developer with a growing portfolio of independent projects, underpinned by a deep commitment to continuous learning and innovation. Actively embedded within Brighton’s vibrant tech ecosystem, championing collaborative growth, community-led initiatives, and cross-disciplinary knowledge exchange.

EDUCATION

University of Sussex BSc Game Development & Multimedia (Honours)	Sept 2022 - July 2025
University of Sussex International Year One in Computing	Sept 2021 - July 2022
Sunway College Cambridge GCE A-Levels - Physics, Maths, Economics	March 2019 - Dec 2020

EXPERIENCE

YOUNG MALAYSIAN ENGINEERS(YME) Engineering Content & Marketing Officer <ul style="list-style-type: none">Spearheaded marketing strategies for MSTC’25, aligning content with themes in semiconductor innovation, Verilog and IC design.Collaborated with engineers and industry partners to produce technical content and campaigns tailored to aspiring computer engineers.Boosted engagement and visibility through data driven outreach, simplifying complex engineering concepts for broader reach.	May 2025 - Present
CHICHESTER COLLEGE GROUP Higher Education Engineering Marketing Coordinator <ul style="list-style-type: none">Supported marketing for engineering and tech programs, highlighting pathways in computer and semiconductor engineering.Coordinated outreach campaigns and events showcasing technical disciplines, including digital systems during London UCAS events.Streamlined promotional efforts across digital platforms to engage prospective students in STEM and engineering fields	Dec 2024 - Present
University of Sussex Accelerator Startup Programme Software Engineer Intern <ul style="list-style-type: none">Developed and maintained Java-based internal tools to streamline workflows and enhance system efficiency.Collaborated with senior engineers to troubleshoot, debug, and optimize core software components.Contributed to code reviews, testing, and documentation to ensure code quality and long-term maintainability.	May 2024 - Sept 2024
Wendy Project Team Lead <ul style="list-style-type: none">Applied systems oriented thinking to optimize workflow efficiency and reduce wait times in a fast paced environment.Collaborated in a team based setting to maintain operational reliability, mirroring principles of parallel processing and task coordination.Ensured consistent quality and compliance, reflecting attention to detail crucial in engineering processes and safety critical systems.	Sept 2022 - May 2024

ACHIEVEMENT

<ul style="list-style-type: none">Gold Spirit of Sussex AwardMicrosoft Mentorship Program31st Asia-Pacific Regional Scout Jamboree ParticipantSunway Coding & Physical computing workshop4th Malaysian Solar Indoor Competition Participant	<ul style="list-style-type: none">Lego Education Tug of War ParticipantRambu Pengakap Muda2014 National Robotics Competition Open Category -3rd PlaceHead of IT – High School LibraryVice President of Robotic Club
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PROFESSIONAL CERTIFICATES

<ul style="list-style-type: none">LEARNING FGPA DEVELOPMENTLEARNING VERILOG FOR FGPA DEVELOPMENTARM CORTEX-M ARCHITECTURE AND SOFTWARE DEVELOPMENT SPECIALIZATIONDATA ANALYTICS COURSE WITH GENERATIVE AI	<ul style="list-style-type: none">CLOUD SECURITY AND AUDIT FUNDAMENTALSCOMPLETE C# UNITY GAME DEVELOPER 2D C#FPGA ARCHITECTURE BASED SYSTEM FOR INDUSTRIAL APPLICATION
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TECHNICAL SKILLS

Computer Languages: Python, C, C++, C#, SQL, Verilog, SystemVerilog, Assembly, HTML, CSS, JavaScript, React, Java
Tools: Design Compiler, PrimeTime, FPGA, LTSpice, Git, TCL, Zsh, Bash, Linux, Unity, GameMaker Studio 2, Godot, IntelliJ
Development Tools: Jira, Confluence, BitBucket, Scrum Development, Agile Development
Soft Skills: Leadership & Interpersonal Communication, Adaptability & Versatility, Problem Solving & Critical Thinking, Marketing Prowess
Languages: English, Mandarin, Malay, Cantonese

PROJECTS

BANKING APP USING JAVA

- Developed a resilient console-based banking system using Java and MySQL, emphasizing secure user authentication, data integrity, and transaction reliability.
- Implemented encryption protocols and streamlined database connectivity via JDBC to ensure seamless backend operations.
- Applied object-oriented design principles to enhance system maintainability and scalability; utilized MySQL Workbench for efficient database administration and troubleshooting support.

JAVA HANGMAN GAME

- Implemented core game logic including word selection, user input handling, guess validation, and win/loss conditions.
- Features like limited attempts, display of guessed letters, and hangman visual progression were implemented
- Tested game functionality with multiple word lengths and edge cases to ensure consistent performance.

WEATHER APP USING JAVA

- Engineered a weather application by integrating OpenWeatherMap and Geolocation APIs to deliver real-time, precise weather forecasts.
- Developed an intuitive Java Swing GUI focused on seamless user experience, enabling interactive data visualization.
- Implemented robust JSON parsing and error handling to efficiently process API responses and ensure accurate, responsive weather updates.

3D HORROR SURVIVAL GAME

- Integrated in-game analytics to track player behavior, progression patterns, and interaction data across multiple levels.
- Analyzed gameplay metrics to inform design iterations, balancing difficulty and improving user experience through data-driven decisions.
- Managed end-to-end development, incorporating structured testing, performance tuning, and technical documentation to support review and evaluation.

2D PLATFORMER GAME

- Engineered a full-featured 2D platformer/shooter in GameMaker Studio 2, complete with fluid movement, enemy AI, and level progression
- Architected a custom save system and modular shooting mechanics, including weapon logic, projectile physics, and cooldown balancing
- Directed all aspects of gameplay design, asset integration, and UX refinement to deliver a cohesive and engaging player experience

SETTLERS OF CATAN

- Reimagined the classic board game in Unity with C#, developing core gameplay systems including dynamic resource generation, trading logic, and building mechanics
- Designed modular, scalable architecture to support turn-based gameplay and player interactions
- Collaborated in a multidisciplinary team to prototype, playtest, and refine mechanics for an authentic and engaging digital experience

FGPA PROJECT - FLIP-FLOP

- Demonstrated sequential logic, using a rising clock edge to capture and store input data (D) into an output register (Q), a fundamental building block of digital systems
- Programmed FPGA bitstream and loaded onto hardware, including setting pin constraints and using APPIO toolchain to flash the design onto the Go Board.
- Developed a blinking LED application, chaining flip-flops to create a counter that toggles an output LED, demonstrating state-based design

FGPA PROJECT - SWITCH DEBOUNCER

- Eliminated false triggers from mechanical switch bounce, ensuring each press toggled an LED reliably.
- Used sequential sampling approach, capturing and validating steady input states over clock cycles before changing logic state .
- Programmed and tested on FPGA hardware, integrated with the previous LED-blink/counter design to demonstrate stable, glitch-free operation

FGPA PROJECT - SEVEN-SEGMENT DISPLAY DRIVER

- Designed a combinational logic and lookup table system to convert binary inputs into accurate segment outputs.
- Implemented multiplexing to drive dual-digit displays using shared I/O pins, ensuring stable, flicker-free visuals.
- Integrated with counters and flip-flops; synthesized, constrained, and tested on FPGA hardware for real-time numeric output.

PROFESSIONAL AFFILIATION

- Student Member, Chartered Institute of IT
 - Student Member, Engineers Without Border
- Student Member, BrightNetwork

EXTRACURRICULAR ACTIVITIES

- Digital Engagement Specialist for LingoLiberation Charity
 - University of Sussex Sports Photographer
 - Member of XRInitiative Brighton Community
 - Member of Unity Brighton Community
- Local football league social media manager
 - Volunteer for Gibbon Conservation Society
 - Volunteer for Evolve 2025 Brighton
 - Member of ASYNC Silicon Brighton

REFERENCES