Johannine Enerio

Final year Computer Engineering student at the National University of Singapore. A focused, adaptable, and committed individual, who believes in complementing technology with creativity and using programming to leave positive impacts. Aspiring for a role in software/web development, database management and computer graphics and honing my skills.

EXPERIENCE

Advanced Micro Devices (AMD) Singapore – Co-op/Intern   Jan-June 2022
Product Development Engineering of Advanced Graphics Processor Units for Performance and Quality/Reliability
- Wrote Python scripts to perform file comparison and data extraction/processing
- Integrated existing tools and scripts onto web platform
- Developed dynamic website for streamlining team workflow
- Implemented database system for reject/fail unit tracking
- Prepared Power BI visualisations to aid in project status tracking

Tools used: Python, Pandas, PowerBI & DAX, Web Dev (HTML, CSS, JS)

EDUCATION

National University of Singapore   Aug 2019-Present
Bachelor of Engineering – BE, Computer Engineering with a Minor in Entrepreneurship
- Expected date of graduation: May 2023
- Current Cumulative Average Point (CAP) score: 4.33/5.0
- Relevant modules taken: Engineering Practices & Principles, Programming Methodology, Discrete Structures, Software Engineering & OOP, Digital Design, Signals & Systems, Data Structures & Algorithms, Real-Time Operating Systems, Database Systems, Computer Networks, Computer Graphics, Computer Vision and Pattern Recognition, Design and Analysis of Algorithms, Computer Engineering Capstone Project, Interaction Design, Software Engineering Principles and Patterns

ACADEMIC PROJECTS

PeerPrep – Live Coding Interview Preparation Platform
- Developed the frontend UI and web APIs for the platform with *MongoDB, Express, React, Node (MERN)* stack.

TripEZ – UX Research and Prototyping Interaction Design Project
- Conducted user research and testing, wireframing, prototyping using *Figma* and analysis to conceptualise a travel planning mobile application, with the use of thinking principles and methods to understand our users and create innovative design solutions.

Laser Tag Game System – NUS Computer Engineering Capstone Project
- Responsible for the internal wireless communications between wearables and game relay nodes.
- Applied wireless programming on *Linux* via *Bluetooth Low Energy (BLE) protocol* to ensure continuous and reliable short-range communication, while effectively handling data fragmentation and corruption.

Database Schema Design Project
- Designed schema and stored procedures for a defined application, using *SQL* and *PostgreSQL*.
- Implemented triggers and database normalisation to reduce data redundancy and improve data integrity.

LifEasier – CLI-based Schedule and Task Management Application
- Developed the tabular UI and editing features for presenting weekly class schedules and listing tasks in *Java*.
- Collaborated with software engineering team on *Agile* project and coordinated the development of multiple features for our application.

CO-CURRICULARS & LEADERSHIP

National University of Singapore Filipino Cultural Club (Barangay NUS)
Marketing Director   Aug 2021-Present
- Set direction for all social media marketing and engagement and spearhead planning of content schedule and execution of campaigns
- Managed and collaborated within and across core team committees in creation of marketing collaterals for various events and initiatives

National University of Singapore Wind Symphony
Publicity Sub-Committee Member   Feb 2020
- Set design concept for marketing collateral of the annual concert: InTempo 2020

VOLUNTEER EXPERIENCE

National Library Board, library@harbourfront
Programme Facilitator (various events)   Jan 2020, Mar 2019
- Managed and facilitated booth activities for library patrons, attracting about 200 participants to a 3D printing booth. *[PRESSPLAY 6, Youth and Young Adults Art Event]*
- Trained patrons on how to use the library's shelf numbering and organisation system to find specific books. *[library@harbourfront 1st Anniversary Celebrations]*

Chinese Development Assistance Council (CDAC), Project Excellence
Programme Facilitator, Group Leader   Jun 2019
- Facilitated craft activities and led groups on an educational tour around Gardens by the Bay Singapore, as well as organise and lead team bonding games for 150 participants.

PERSONAL PROJECTS

Omatian Singapore [omatian.sg]
A small hobby-turned-business, selling art and stickers mainly inspired by life in Singapore.
Sole Proprietor   Apr 2019-Present
- Created original art and evaluated what materials and designs would appeal best to the community.
- Developed website frontend and backend to facilitate shop orders.
- Designed and created social media collateral and marketing materials.
- Handled budgeting and accounting of finances, and fulfilment of all shop orders.
- Communicated regularly with customers and collaboration partners.

DSTA BrainHack 2020 – CODE_EXP participant: Android app development.
Shopee Code League 2020 participant: Data Handling and Analysis using Python and the pandas library.
DSTA BrainHack 2021 – Cyber Defenders Discovery Camp: CTF competition with a team of 4.

ADDITIONAL INFORMATION

- **Programming Languages:**
  Python, HTML5, CSS3, JavaScript, Java, PHP, SQL, PostgreSQL, C, C++, Verilog HDL, ARM Assembly
- **Database Management:**
  MySQL server, MongoDB, Google Firebase
- **Data Analysis Tools:**
  Microsoft Office 2019 (Word, Excel, PowerPoint), Pandas (software)
- **Interests:**
  Creating music and digital art, travelling and cycling.