Delsther James Edralin



4th Year in Computer Science University of British Columbia +63 976 510 4939 | +1 672 999 1495 delstherjamese@gmail.com **⊘**github.com/jamesedra **O**linkedin.com/in/dedralin **in**

Technical Skills

Languages: Java \cdot Python \cdot C \cdot C++ \cdot JavaScript \cdot HTML \cdot CSS \cdot R

Frameworks: JSwing · JUnit · Node.js · React · Next.js · RESTful API · Tailwind

Developer Tools: Git · IntelliJ · Visual Studio · VS Code · Valgrind · SQLite · PostgreSQL

Technical Projects

Personal Web BlogFolio — Next.js | React | Typescript | Node.js — [Live Demo]

- Developed and maintained a technical blog with a primary focus on software engineering and development
- Showcased software engineering and digital design projects with details into the creative and technical processes
- Implemented Nodemailer.js to enable contact with readers and potential collaborators

Book Marker Desktop App — Java | JUnit | JSON | JSwing

- Created a Java Swing desktop application for managing an optimized, personal library for tracking books
- Utilized JUnit to develop test cases to validate code behaviour and performance efficiency
- Integrated seamless data persistence and event-logging functionality using JSON objects

${\bf Quadtree\ Pruning-C++}$

- Created an image compression system by utilizing space-partitioning tree data structures
- Implemented a color quantization algorithm (median-cut) to reduce the number of colors represented in the image
- Achieved high image processing efficiency by reducing file sizes within 19% 84% across multiple tested images

Flood Fill Image Manipulation — C++ | ImageMagick

- Implemented flood fill algorithms: Depth-First Search and Breadth-First Search for image filtering
- Utilized ImageMagick library for image processing tasks, such as generation of animated GIFs

Education

Bachelor of Computer Science — University of British Columbia | Vancouver, CA Sep 2022 - Present

Bachelor of Science in Architecture — De La Salle-College of Saint Benilde | Manila, PH Aug 2015 - May 2020

Work Experience

Architectural Technologist — D&J Builders and Power Systems Corporation

May 2020 - Aug 2022

- Created precise technical drawings in AutoCAD for industrial, medical, and government administrative facilities
- Improved project schedules using GANTT and Critical Path methods to accommodate delayed construction projects

Intern Architect — JVV Konsult

Sep 2019 - Dec 2019

- Prepared scaled drawings and contract documents for building contractors using AutoCAD, SketchUp and Lumion
- Planned diagrams/layouts during schematic design for client presentations and project documentation

Additional Projects

Minecraft Education Learning Portal — Microsoft Education Partnership Project

Feb 2023 - Apr 2023

• Led a team of six in researching, proposing and developing a prototype for an innovative hub server, facilitating user experience to lesson packs through built-in portals, while strategizing player incentives for user retention.