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Technical Skills

Programming Language: Java, C, Python, SQL, JavaScript, HTML, CSS, Node.js, Express.js

Technologies / Frameworks: AWS, React, Spring Boot, MySQL, MongoDB, Git, JUnit, TCP/IP, HTTP

Developer Tools: IntelliJ, Visual Studio Code, GitHub, MySQL, AWS S3, AWS EC2, AWS lambda, Amplify

Personal Projects:

Full Stack Expense Tracker ([FinTrack](#)) | *Vaadin, Spring Boot, CSS, Java, MySQL*

- Developed a financial tracking application that allows users to manage budgets, expenses, and income.
- Utilized Vaadin for the frontend, Spring Boot for backend services, and MySQL for data storage.
- Implemented REST APIs for dynamic interactions between the frontend and backend.
- Gained full-stack development experience by integrating secure back-end infrastructure with dynamic front-end elements.

Portfolio Website | *HTML, CSS, JavaScript*

- Created a personal portfolio website to showcase projects, skills, and provide a contact point.
- Utilized HTML, CSS, and JavaScript to develop a responsive and accessible user interface.
- Deployed the website on a live production environment, ensuring smooth user interactions.

Escape Room Game (GUI) ([ScapeRoom](#)) | *Java, AI, GUI*

- Collaborated in a team of 3 to develop an interactive escape room game featuring a graphical user interface.
- Integrated AI to analyze player patterns, generating 3 distinct levels with randomized puzzles to enhance replicability.
- Gained experience in GUI development, systematic practices, and AI integration.
- Improved teamwork and communication skills during development.

AI Scheduling Optimisation Project | *Java, Parallel Processing, Branch-and-Branch Algorithm, multithreading*

- Developed a solution for a complex scheduling problem to minimize execution time (makespan) of tasks represented as nodes in a Directed Acyclic Graph (DAG).
- Implemented a branch-and-bound algorithm, optimizing task assignment to multiple processors for better performance.
- Leveraged multithreading to optimize the algorithm's execution, utilizing parallel processing for efficiency.
- Applied algorithmic techniques for efficient scheduling and resource allocation, and used optimization mathematics to minimize makespan.

Technical Experience

Software Engineering Intern | Busseek (Nov 2024 – present)

- Developed a scalable multi-module platform using React, node.js and Express.js.
- Managed database operations with MongoDB and deployed on AWS.
- Integrated services and modules to ensure seamless functionality and performance.
- Collaborated with the team on integrating key modules, including user management, CV processing/ Creation, Job applications, financial transactions, and communication features.
- Gained hands-on experience with API integration and UX/UI principles.
- Demonstrated Strong Problem-solving abilities and attention to details throughout the project.

Research Project: Towards Objective and AI-Driven Intelligibility Assessment for Dysarthric Speech

The University of Auckland | 2025

- Developing a deep learning-based assessment system leveraging Large Language Models (LLMs) to evaluate speech intelligibility in dysarthria.
- Aiming to enhance traditional SLP evaluations with an objective, scalable, and data-driven tool.
- Exploring applications in speech therapy, assistive communication technologies, and clinical diagnostics.

Non-Technical Experience

Sales Assistant | *Cotton On Group (Jan 2020 – Mar 2022)*

Sales Assistant | *Country Road Group (Mar 2022 – Mar 2023)*

Treasurer | *Sudanese Society In NZ (June 2023 – June 2024)*

President | *African Student Association (June 2023 – June 2024)*

Education

University of Auckland | *(Mar 2022 – Nov 2025)*

B.Sc. Software Engineering

Relevant coursework: OOD in java, OOP, Data Structure, Algorithms, Software Engineering, Database Management Systems, Computer Systems, Network and Security, Quality Assurance, User Interface Design, Applied Statistics, Linear Algebra and Discrete Math.