

Jay Esquivel Jr.

Software Engineer

[linkedin.com/in/jaysqvl](https://www.linkedin.com/in/jaysqvl) 
github.com/jaysqvl 
jaysqvl.com 
jaysqvl@gmail.com 
+1-778-991-1371 

TECHNICAL SKILLS

Programming Languages

- C/C++
- Java
- Python
- HTML/CSS
- JavaScript
- SQL/T-SQL
- R
- Racket
- LaTeX

Frameworks and Engines

- React.JS
- Node.JS
- TailwindCSS
- Langchain
- HuggingFace
- Flask
- JUnit & GoogleTest
- Android
- Hugo

Development and Deployment

- Git
- Docker
- GitHub Actions & Pages
- Supabase
- Pinecone
- Firebase
- Vercel
- Figma
- Canva

Knowledge Base

- Algorithms
- Data-structures
- Networking
- IT Solutions
- Databases
- Database
- Machine Learning
- Agile Methodologies

EDUCATION

○ Sep 2022 - PRESENT

Bachelor of Applied Science, Computer Science SPC. SOFTWARE SYSTEMS
Simon Fraser University

○ Sep 2020 - Aug 2022

Bachelor of Science, Computer Science and Mathematics
The University of British Columbia

NOTABLE PROJECTS

○ Sep 2023 - PRESENT

NouveauCalendar (WIP) | JavaScript, React.JS, Node.JS, TailwindCSS

- Minimalist calendar created to organize tasks with more granularity in order to improve users productivity and organization by reducing cognitive load
- Current key improvements include but are not limited to, continuous vertical date scrolling, less element clutter through compaction with better visual integration, and a brand new task list-view and task viewing and management experience to facilitate a more fluid workflow

○ Jul 2023 - Aug 2023

Divide and Conquer Game | Java

- Implemented a token-based packet messaging system using Java solving spontaneous system desynchronization and reducing client-to-client latency over LAN by factor 5x (from 100ms to 20ms round-trip time, 3ms base ping)
- Added server asynchronous client-handling improving performance by upper bound factor # of logical threads
- Compartmentalized code base and decoupled functions/features, reducing merge conflicts and enhancing team development efficiency by 500%

○ May 2023 - Aug 2023

Impersonator | Python, Langchain, HuggingFace, OpenAI, Supabase/Pinecone

- Abstract OOP designed back-end using Langchain to modularly support various LLM (localized, fine-tuned, etc), vector vatabase, and embedding model providers to improve maintainability
- Performance maximized to surpass API rate/contextual limit of combination of chosen models for a seamless user experience even when using PDFs surpassing 6000+ pages
- Streamlined development environment setup time and eliminated dependency incompatibility errors through Dockerization
- Streamlined development of front-end leveraging Google Streamlit UI library

Jay Esquivel Jr.

Software Engineer

linkedin.com/in/jaysqvl 
github.com/jaysqvl 
jaysqvl.com 
jaysqvl@gmail.com 
+1-778-991-1371 

AWARDS

SustainHacks - 2nd Place
March 2023

AP College Board Scholar with Honor Award
June 2020

Top Senior Athlete Scholarship
June 2020

Philippines Basketball Nationals (U21) 8th Place, Team Canada
May 2019

BC Ultimate Frisbee Senior Provincials 2nd Place & All-Star
April 2019

BC Volleyball Junior Provincial 8th Place & All-Star
November 2018

EXTRA-CURRICULARS

SFU Open Source (OS) Development Club
September 2023 - PRESENT

SFU Google Developer Student Club (GDSC)
September 2023 - PRESENT

UBC CVC Social Club Executive Team Member
March 2020 - PRESENT

FREEGEEK Tech Recycling Center Hardware Tester
Sep 2017 - Oct 2022

VikingsDev Coding Club Executive/Mentor
2017 - 2020

PROJECTS (cont.)

Jan 2023 - Aug 2023

PeerAdvice

- Integrated a PostgreSQL User Database to store all registered client information
- Developed a Python flask-based back-end featuring GET and POST endpoints to efficiently handle low-level API requests (e.g. to the PostgreSQL Database)
- Leveraged the Calendly booking web-service to handle advisor availability and reduce the complexity of the system
- Integrated Google Authentication deployed using Firebase to generate or associate connecting clients their UIDs

January 2022 - February 2022

Hercules

- Learned and then implemented the entire front-end view/controller package from scratch using the Java Android library
- Facilitated back-end data structure design changes within the team thus reducing run-time memory usage by over 200% to ≤ 1 GiB

EXPERIENCES

DEC 2023 - PRESENT

AI SOFTWARE DEVELOPMENT CONTRACT WORKER

Shawn Esquivel

- Develop REST APIs and web applications that communicate and or operate within various core services of client's business infrastructure

2023 - PRESENT

OWNER, OPERATOR AND TUTOR

Jaysqvl Solutions

- IT Solutions for small businesses and individuals
 - Networking, virtualization and containerization, software development, security systems and cybersecurity, and the maintenance of these systems
- Private tutoring for High School and University students in Mathematics and Computer Science

2011 - PRESENT

PART-TIME CLEANER + BOOKKEEPER

FranciaJCW Cleaning Services

- Began house cleaning at 13 years old to help and understand family financials
- Developed clear communication strategies with clients from manage payment invoices, scheduling and email correspondance