

Alexander Potiagalov

Vancouver, BC | 604-352-5948 | apa168@sfu.ca | linkedin.com/in/alexander-potiagalov/ | github.com/AlexanderPotiagalov | [Portfolio Website](#)

EDUCATION

Simon Fraser University

Burnaby, BC, Canada

Bachelor of Science in Computing Science, Minor in Business

Expected Graduation: Mar. 2027

- **GPA:** 3.62/4.0, Dean's Honour Roll Fall 2024
- **Relevant Coursework:** Statistics, Introduction to AI, Data Structures & Algorithms, Software Engineering

TECHNICAL EXPERIENCES

Co-Founder & Developer

Jan. 2025 - Present

ResuMate (Startup)

Burnaby, BC

- Launched a resume & cover letter builder with **OpenAI API**, using **prompt engineering** for tailored job-specific content
- Integrated **JSearch API** to match resumes with career opportunities, increasing role-fit precision with **keyword analysis**
- Applied Jakob Nielsen's 10 heuristics for user interface design using **React**, **Tailwind CSS**, **ShadCN UI**, and **Figma**
- Acquired strong product experience, managing **architecture**, **API integration**, and rapid **MVP** iterations to final polish

Full-Stack Developer

Mar. 2024 – Oct. 2025

SFU Surge

Burnaby, BC

- Learned **MERN** stack by building a **full-stack** e-Commerce platform for SFU students, boosting P2P transactions by **25%**
- Deployed Multi-Factor Authentication, item listings, and messaging features using **Node.js** and **MongoDB**
- Enhanced **UX/UI** by creating a responsive website with **React & Tailwind CSS**, improving cross-device usability by **35%**
- Incorporated **PayPal** and **REST APIs** to ensure secure financial transactions, enhancing user trust and payment reliability
- Collaborated within an **Agile** environment, coordinating with the team through **Git** version control and regular standups

Software Developer

Apr. 2023 – Jan. 2024

ARB2 (Startup)

Remote

- Developed an algorithmic stock trading system in **Python** for analyzing time-series swing movements in volatile markets
- Gained experience with **Yfinance API** and **FMP API**, by fetching and handling financial data at 2-minute intervals
- Utilized **queues** and **hash tables** to detect and model stock behavior with statistical methods like regression line analysis
- Wrote modular, optimized code for **data-heavy** applications and visualize patterns using **Python Matplotlib** library

TECHNICAL PROJECTS

Vacuum Cleaner AI | *Python*

🕒 **Jan. 2025**

- Built a grid-based simulation of an autonomous vacuum **agent** to model real-time pathfinding in constrained environments
- Implemented and compared **BFS**, **DFS**, **UCS**, **Greedy**, and **A* Search** algorithms to optimize traversal efficiency.
- Used **Manhattan** and **Euclidean** heuristics in **A*** to assess accuracy and computational performance across layouts.

AVL Tree Data Structure | *C++*

🕒 **Dec. 2024**

- Engineered a self-balancing binary search tree with **O(log n)** insertions, deletions, and search using AVL logic
- Handled complex **LL**, **RR**, **LR**, and **RL rotations** to cut worst-case tree height by 50%, improving data access times
- Produced a **template-based** architecture for type-agnostic operations, supporting primitive and user-defined data types

Photon-Dash | *Javascript, HTML, CSS*

🕒 **Sep. 2024**

- Created a 2D space-themed browser game in **vanilla JS**, with physics-based motion, score tracking, and collision detection
- Executed a responsive, modular front-end with **HTML5**, **CSS Grid/Flexbox**, and **Figma** for cross-platform playability
- Shipped **MVP** in under 24 hours at **Fall Hacks Hackathon** with a 3-person team using **Git** for collaboration

TECHNICAL SKILLS

Languages: Python, C++, JavaScript (ES6+), C, SQL, HTML5, CSS3, Bash

Frameworks & Libraries: React.js, Node.js, Express.js, Tailwind CSS, ShadCN UI, NumPy, Pandas, Matplotlib, Flask

APIs: OpenAI API, Gemini API, PayPal API, OpenWeatherMap API, JSearch API, Yfinance API, FMP API, REST APIs

Tools: Git, GitHub, GitLab, Docker, CI/CD (GitHub Actions), Linux, Virtual Machines, Visual Studio Code, Figma

Concepts: Data Structures & Algorithms, Search Algorithms (BFS, DFS, UCS, Greedy, A*), Prompt Engineering, Agile (Scrum), MVC, Business Strategy.