

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:** 3.7, Dean's Honour Roll Fall 2024 & Spring 2025
- **Relevant Coursework:** Statistics, Introduction to AI, Data Structures & Algorithms, Software Engineering

TECHNICAL EXPERIENCES

Software Developer

May 2025 - Present

Google Developer Student Club

Burnaby, BC

- Co-led development of a **React**-based campus events dashboard for **200+** students, integrating Firebase for real-time data
- Delivered three workshops on **Next.js** and **Tailwind CSS**, boosting attendance by **35%** and onboarding **50+** members
- Reviewed code & mentored **10+** juniors on **JavaScript** best practices, improving code quality & reducing bugs by **20%**

Software Developer

Jan. 2025 - Apr. 2025

SFU Surge

Burnaby, BC

- Launched a resume & cover letter builder with **OpenAI API**, using **prompt engineering** for tailored job-specific content
- Leveraged **JSearch API** to match resumes with career opportunities, providing access to over **120,000+** job listings.
- 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

Frontend Developer

Apr. 2024 – Aug. 2024

CJSF 90.1FM Radio

Vancouver, Canada

- Designed & developed a modernized website for CJSF 90.1FM Radio using **Agile**, improving user engagement & donations
- Used **Headless Drupal** & **NextJS** to build a dynamic, API-driven frontend, improving UI for **1,000+** monthly visitors
- Worked with CJSF 90.1FM Radio to prototype website layouts and workflows using **Figma**, increasing donations by **20%**
- Implemented accessibility improvements, ensuring **WCAG** compliance and enhancing usability for diverse audiences

TECHNICAL PROJECTS

Tech Notes | Node.js, Express.js, MongoDB, React, Redux Toolkit, JWT

🕒 June 2025

- Deployed a full-stack note & task management app using the **MERN stack**, enabling real-time CRUD operations
- Incorporated **JWT authentication** for secure user login and **Redux Toolkit** for efficient state management
- Utilized **Postman** for API testing and **Figma** for UI/UX design, ensuring a fully responsive experience across all devices

Sketch 3D Converter | React, TypeScript, Three.js, OpenAI Vision API

🕒 May 2025

- Developed a **React + TypeScript** sketch tool that converts strokes to SVG & extrudes them into 3D via **Three.js**
- Employed **OpenAI Vision API** for shape classification, enabling AI-driven recognition of hand-drawn sketches
- Enhanced 3D modeling by refining extrusion logic, improving shape accuracy by **30%** & ensuring smooth user interaction

Clean The Web | JavaScript, Tailwind CSS, Google Safe Browsing API, WhoisXML API

🕒 Apr. 2025

- Shipped a **Chrome extension** that analyzes trust scores via SSL, domain age, & user reports to detect phishing scams
- Integrated **Google Safe Browsing API** & **WhoisXML API** for real-time threat analysis, reducing unsafe visits by 30%
- Created an intuitive UI with **Tailwind CSS** & **Vanilla JS**, improving user awareness and phishing prevention

Vacuum Cleaner AI | Python, NumPy, Matplotlib

🕒 Jan. 2025

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

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)