Alexander Potiagalov

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

9 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

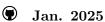
- Developed a React + TypeScript sketch tool that converts strokes to SVG & extrudes them into 3D via Three.js
- Employed OpenAI Vision API for shape classification, enabling AI-driven recognition of hand-drawn sketches
- Enhanced 3D modeling by refining extrusion logic, improving shape accuracy by 30%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



- 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)