# NAM NGUYEN

604-704-9689 • vhn1@sfu.ca • Linkedin • Portfolio • Github

## **Technical Skills**

Programming Languages: Python, Java, HTML, CSS, JavaScript, TypeScript, SQL

Libraries/Frameworks & Databases: React.js, React Native, Node.js, Express.js, Tailwind CSS, Spring, PostgreSQL, MongoDB Tools & Productivity Software: Visual Studio Code, Figma, Git, Docker, Bootstrap

## **Personal Projects**

## NamNeedsTODO | React.js, Tailwind CSS, Express.js, Node.js, Docker, MongoDB

May 2025 - Present

- Developed a full-stack task management system using the MERN stack that exposed RESTful APIs to support task CRUD operations and status toggling through a responsive Tailwind CSS interface.
- Engineered a modular backend with Express and Node.js, separating routes, controllers, and models, and implemented
  centralized error handling to align with object-oriented development principles.
- Integrated MongoDB to enable scalable and schema-less task storage with support for dynamic fields.
- Containerized the app with Docker and configured Nginx as the production web server within Docker Compose to serve the frontend and proxy backend requests.

## Roaming App | React Native, Express.js, Firebase, Cloudinary, MapLibre, Google Gemini

February - May 2025

- Developed a full-stack mobile app using React Native, Express.js, and Firestore while delivering 95% of planned features in 8 weeks and implementing secure user authentication with Firebase.
- Optimized media performance by configuring Cloudinary uploads (quality & ratio) to reduce cloud storage and to improve image render speed.
- Built an interactive map with MapLibre to visualize user's geotagged posts and display personal travel histories.
- Integrated Google Gemini as a chatbot to generate personalized travel captions and suggestions from uploaded photos.

## Hotelytics | Python, GeoPandas, Streamlit, OSMnx, Folium, Networkx, scikit-learn

April 2025

- Performed exploratory spatial analysis on 80+ Vancouver hotels using weighted amenity scoring system within a 350m buffer.
- Integrated Streamlit with Folium and OSMnx layers for dynamic UI filtering and optimized walking tour visualization.
- Clustered 17,000+ amenities using DBSCAN and visualized spatial zones with convex hulls to reveal urban activity patterns.
- Designed and compared Travelling Salesman Problem (TSP) and Greedy Nearest Neighbour (GNN) routing algorithms on pedestrian networks from OSMnx, improving tour efficiency by ~15% with TSP solutions.

## Realtor Web Application | HTML, CSS, JavaScript, Java, Spring, PostgreSQL

January - April 2024

- Led an Agile team of 5 to develop a full-stack web app that enhanced a realtor's digital presence and client engagement.
- Took ownership of frontend development and UI/UX design, mentored teammates, and worked directly with the client to gather requirements, leading to a 95% client satisfaction rating.
- Integrated property mapping using Google Maps API and built a secure backend with PostgreSQL and Spring Boot.

## Non-Technical Experience

## Cashiers and Customer Service | Canadian Tire Grandview

November 2021 - April 2024

- Collaborated effectively with team members and acted as an intermediary between customers and manufacturers.
- Resolved both routine and unexpected problems by understanding and adhering to company policies, ensuring customer satisfaction and clear communication.
- Maintained a positive attitude and high-quality service under pressure during busy periods.

#### Education

## Simon Fraser University | Burnaby, BC

January 2023 - Present

B.sc. Computing Science

• Dean's List: Fall 2024 and Spring 2025