

JEFFREY SHWÉ

Vancouver, BC | 778-938-8377 | jeffreyshe1@gmail.com | rangoon.neocities.org | [LinkedIn](#)

EDUCATION

UNIVERSITY OF BRITISH COLUMBIA

Bachelor of Applied Science

Major in Integrated Engineering; Specialization in Mechanical and Materials Engineering

Vancouver, BC

Expected May 2027

WORK EXPERIENCE

TRANSPORTATION INVESTMENT CORPORATION

Surrey, BC

Transportation Engineering Co-op (*Surrey Langley SkyTrain Project*)

May 2026 – Present

- Lead stakeholder meetings on the \$6B Surrey Langley SkyTrain Project between three municipal governments (City of Surrey, City of Langley, Township of Langley), three project contractors, and major third parties including BC Hydro and TELUS.
- Track and process submittals through document control review cycles; maintain a tracker of status and revisions.
- Engineer traffic management plans in Bluebeam to MOTI standards; produce route maps for ministry executive tours.

METRO VANCOUVER

Burnaby, BC

Project Research Assistant (*Liquid Waste Services*)

Jan 2025 – Aug 2025

- Built *Parcel2Main*, a custom Python toolbox on ArcGIS that automatically maps connections between properties and sewer mains; wrote documentation and produced video tutorials for the Utility, Infrastructure, and Analysis team.
- Designed an internal HTML resource page consolidating team files and documentation into a single reference point; authored a 60-page technical report on model calibration and software workflows.
- Calibrated a full hydrological model of UBC's sewer network, analyzing diurnal patterns in weekday/weekend/holiday data.

OCEAN NETWORKS CANADA

Victoria, BC

Operations Support Co-op

May 2024 – Aug 2024

- Managed logistics for 40+ shipments of oceanographic research equipment (seismometers, \$1.2M CTDs, transducers) with zero errors, tracked through Jira and Confluence.

DESIGN EXPERIENCE

UBC SMART CITY

Vancouver, BC

UI/UX Designer

Sep 2022 – Feb 2023

- Designed user interfaces for a walking assistant app in Figma, from wireframes to high-fidelity mockups.
- Built a cross-platform mobile prototype in React Native (Expo CLI, Node.js), tested live on physical devices.
- Ensured design consistency using a shared component library, informed by user research and interviews.

PROJECTS

SEARCH AND RESCUE DRIFT BUOY

Sep 2025 – Apr 2026

- Built an AIS search-and-rescue drift buoy (6-person capstone) for the Canadian Coast Guard, approved for deployment by Transport Canada, with C and Python firmware, custom PCBs, CAD enclosures, and IP68 waterproofing.

MOON DUDE

Feb 2025 – Present

- Built *Moon Dude*, an interactive 3D portfolio in Three.js featuring an explorable lunar surface, low-gravity movement, a music player, and raycasting-based clickable navigation.
- Modeled custom 3D assets in Blender and exported them as glTF/GLB for real-time web rendering on Neocities.
- Developed the site into an ongoing creative medium with 10+ deployed experiences over 600+ hours, spanning explorable planets, generative art (*Game of Life*, *De Stijl*), simulations, and interactive experiments in p5.js and WebGL shaders.

SUPER COOL SUPER STABLE ROCKET EXTREME

Sep 2022 – Apr 2023

- Built a thrust vector control (TVC) rocket (5-person team) that self-stabilizes in two axes using argon-gas actuation, tuning the PID control system in Python via the Ziegler-Nichols method.
- Awarded First Prize in Integrated Engineering's Design Projects (out of 12 teams).

ADDITIONAL

Technical Skills: Advanced in Figma, HTML/CSS, JavaScript, Python; Proficient in Three.js, p5.js, React, Photoshop, Blender

Languages: Fluent in English, Burmese; Proficient in Mandarin; Basic in French, Thai

Interests: Web Design, Children's Books, Painting, Running, Chess, Architecture, Kubrick, Premier League, Ping-Pong