# Olivier Allard

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## Summary

Backend-focused full-stack developer with a strong foundation in TypeScript, C++, and Python. I've shipped a production Android app and worked across web, mobile, and cloud. I enjoy designing systems, improving developer experience, and solving practical performance and scaling problems.

## Experience

**Software Developer** Feb 2025 – Present
*Software Development Studio* *Montreal, Canada*

- Architected and published an Android app using React Native and Expo, backed by Node.js services, reaching 2.5k+ MAU with a 50%+ Play Store listing conversion rate.
- Engineered a serverless purchase pipeline using Cloudflare Workers, Google Cloud Run, and Firestore.
- Built an event-driven webhook handler with Google RTDN to process payments and sync subscription state.
- Established a modular UI using React Native Paper to deliver an accessible design system.
- Restructured the codebase into a monorepo, optimizing shared TypeScript contracts and build pipelines.

## Projects

**Interactive Walkthrough** | *TypeScript* — github.com/CatLover01/rn-interactive-walkthrough Aug 2026

- Forked and modernized the dormant `react-native-interactive-walkthrough` library.
- Replaced the legacy LayoutAnimation mask with Reanimated shared values and rebuilt step navigation, measurement, and mask rendering.
- Added generic, type-safe content components, automatic measurement, safe-area-aware tooltips, and a Docusaurus docs site with an Expo example app.

**AmperePro** | *Python* — github.com/CatLover01/AmperePro Feb 2026 – May 2026

- Designed a desktop UI in Python & PySide6 for electrical circuit management and level selection.
- Implemented a type-safe save system using dataclasses and Dacite for data validation and serialization.
- Planned features in Agile sprints and estimated effort to deliver increments on schedule.

**FireGL** | *C++* — github.com/CatLover01/FireGL Dec 2024 – Jan 2025

- Built a cross-platform C++ graphics library with OpenGL, leveraging smart pointers for safe resource management.
- Integrated third-party libraries (GLFW, GLAD, GLM, Assimp, STB) into a modular rendering API for windowing, math, and 3D asset ingestion.
- Built an example application demonstrating core library setup, mesh rendering, and lighting pipeline.

## Skills

**Languages**: TypeScript, C++, Python
**Frameworks**: React, React Native, Expo, Node.js, Hono, Reanimated, PySide6
**Tools**: Git, GitHub Actions, Docker, Linux, Cloudflare Workers, Google Cloud Run, Firestore
**Spoken Languages**: French (native), English

## Education

**University of Quebec in Montreal (UQAM)** Montreal, Canada
*B.S. Computer Science and Software Engineering* *Sept 2026 – Dec 2029 (expected)*