

Patent Li

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WORK EXPERIENCE

Android Developer | General Motors

Jul 2022 - Jun 2025

- Implemented and maintained Android in-vehicle infotainment applications across GM vehicle portfolio, including the Charging App, HVAC App, and Seat Status Pane App, enhancing user experience and system functionality across Cadillac, Chevrolet, GMC, Buick, Honda/Acura brands.
- Built features and components using **Kotlin**, **Java**, and **XML** within **Android Studio**, following Agile development practices.
- Employed **clean architecture**, **MVVM**, and modern **design patterns** to enhance application performance, scalability, and maintainability across multi-brand deployments.
- Conducted **Root Cause Analysis (RCA)** for defects and systemic issues, significantly reducing recurring bugs and QA feedback loops.
- Developed an internal GUI tool using **Python** to simplify execution of ADB commands, Gradle scripts, environment setup, and test automation; increased team productivity by **200%** on these tasks by eliminating manual steps and reducing reliance on Android Studio for routine workflows.
- Created and maintained **CI/CD pipelines** using **Jenkins**, and delivered high-quality code via **Espresso** and **JUnit** test coverage
- Collaborated with **UI/UX designers**, **product stakeholders**, and **QA engineers** to refine requirements, implement new features, and deliver robust solutions in iterative Agile sprints via **Jira**.
- Assisted with the **onboarding and training of new team members**, providing hands-on mentorship and improving ramp-up speed through knowledge-sharing and internal tooling support.

iOS Developer | Maple Leaf Foods

Sept 2018 - Apr 2019

- Developed applications for visitor management and production line downtime tracking
- Utilized Swift and Xcode to create user-friendly applications, enhancing operational efficiency.
- Implemented secure authentication and data entry forms, improving data integrity and user experience.

PROJECTS

Dice Game (Unity, C#)

April 2025 – Jun 2025

- Designed and developed a turn-based strategy game in Unity where players buy dice and abilities to combat bosses through dice rolls and hand combinations.

Multiplayer Game (Node.js, HTML/CSS)

Jan 2020 – Jun 2025

- Developed the front-end and back-end of an online multiplayer 2D open world game with building, destructible terrain, inventory, usable items and more.
- Built from scratch using Node.js, HTML, CSS, Socket.IO
- Implemented OAuth 2.0 authentication with Cloudflare Zero Trust

EDUCATION

UNIVERSITY OF TORONTO

Bachelor of Science - Machine Learning and Data Science

Sept 2016 - Dec 2021

TECHNICAL SKILLS

- **Programming Languages:** Kotlin, Java, C#, Python, SQL, JavaScript, C++, Swift, R
- **Frameworks:** Espresso, JUnit, Node.js, React, Socket.IO, jQuery, Dagger
- **Tools:** Git, Android Studio, Xcode, Jenkins, Jira, Docker, Unity, Game Maker Studio, Unreal Engine
- **Other:** CI/CD, OAuth 2.0, Agile (Scrum), Cloudflare Zero Trust