

# John Pan

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## Education

### Georgia Tech, College of Computing

Atlanta, Georgia, USA

Master of Computer Science, CGPA: 4.0/4.0, Jan 2024 – Jan 2026

*Concentration:* Computing Systems. *Current course:* Graduate Operating Systems

### McGill University, Faculty of Engineering

Montreal, Quebec, Canada

Bachelor of Mechanical Engineering, Computer Science minor. CGPA: 3.66/4.00, Aug 2016 – May 2021

*Courses:* Data Structures & Algorithms, Database Systems, Java OOP, Software Systems, Applied Machine Learning, AI, Programming Languages & Paradigms

## Experience

### Shopify – Toronto, ON, Canada

Jan 2024 - Present

#### Software Engineer

- **Increased payment accuracy and B2B merchant trust** by leading the design and implementation of a new payment allocation logic that correctly attributes payments across partial fulfillments, returns, and cancellations, **supporting 109% year-over-year growth** in B2B gross merchandise value. (**Ruby on Rails**)
- **Accelerated end-to-end delivery of complex checkout capabilities** by building core components, refactoring brittle business logic into maintainable systems, and driving release readiness through comprehensive test cases, local setup workflows, and a pre-release bughunt, enabling a smooth, on-time launch. (**Ruby on Rails, GraphQL**)
- **Improved checkout reliability and conversion (+15%)** by designing and shipping validation logic in Shopify Functions that prevented invalid merchant configurations from reaching production, reducing checkout errors and customer drop-off. (**Ruby on Rails, GraphQL**)
- **Increased engineering productivity (~25%)** by building and rolling out an internal VS Code extension that streamlined navigation in a large monorepo, now used organization-wide. (**Typescript**)

### PearAI – San Francisco Bay Area, CA - [Website](#) – [GitHub](#)

Jul 2024 - Dec 2024

#### Software Engineer

- Delivered multiple AI-driven features, including search and memory layers, and designed a responsive onboarding UI integrated into the VSCode Webview, improving the user onboarding experience and boosting customer retention to **over 500 monthly and annual recurring paid subscribers**. (**Python/FastAPI, ReactJS, NextJS, Supabase/PostgreSQL**)
- Built backend server logic using **FastAPI**, implementing user credit management, subscription tracking, and a top-up feature, resulting in a **10% increase in monthly recurring revenue to \$6,000**.

### Bell Canada – Montreal, QC, Canada

Feb 2022 – Feb 2024

#### Software Engineer

Full-stack web development in the Bell Network Cloud Portal

- Led and developed full-stack features, achieving **80% reduction in lead time** for automated cloud deployments, **saving an average of 450 man-hours**. (**VueJS Typescript, Python Django REST Framework**)
- Built, and maintained robust **CI/CD pipelines** for new and existing applications, resulting in an **80% improvement in the deployment speed** of new updates and **0% error rate** with no rollback incidents since launching the new application into production. (**OpenShift, Kubernetes, Docker, Gitlab-CI, Artifactory, Helm, Vault**)

## Projects

### Autopilot Pi-Car – [GitHub](#)

January 2024 – May 2024

- Developed autopilot software for a Raspberry Pi-powered car (Python).
- Implemented path following capabilities (A\* search) using an ultrasonic radar allowing autonomous navigation.

**Skills:** Python, JavaScript/TypeScript, Ruby, Cursor, Claude, Agentic workflows, Java, C, C++, SQL, HTML, CSS/Bootstrap/material-UI, Git, ReactJS, Redux, VueJS, Docker, Kubernetes, Helm, GitLab-ci, Django REST framework, Postgres, Scikit-learn