

Patrick Liu

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Experience

Airtable

Software Engineer

New York, NY

Feb 2024 – Present

- Building features for App Sandbox, enabling advanced capabilities for development, change management, and deployment of no-code apps

Addepar

Software Engineer

New York, NY

Jul 2021 – Feb 2024

- Built a tool using **JavaScript** and **Python** for correcting annotations produced by ML models on **20,000+** unstructured financial documents, meeting SLAs and ensuring correct data in clients' instances
- Led development on business-critical web app used daily by **30+ data operators** to configure and test **Java-based** data pipelines without technical knowledge, reducing operator onboarding time from months to weeks
- Led onboarding sessions, wrote documentation, and presented at an internal conference for company-wide initiative to build low-code UIs in **Retool**, enabling engineering teams to ship **30+ internal frontends** to **400+ end users** within days instead of months
- Migrated data tooling to enable Databricks-based pipelines, increasing number of financial custodians supported and processing **\$100B+ client assets per day**
- Implemented **Python Lambda functions** to run data quality checks on financial transaction data extracted from documents for reconciliation

Software Engineering Intern

Sep 2020 – Dec 2020

- Developed codegen tooling to bootstrap new financial market data pipelines in Apache Airflow using **Python**

Apple

Software Engineering Intern

Cupertino, CA

Jan 2020 – Apr 2020

- Explored and prototyped user flows and tooling to enable new Siri developer experiences, demoed to the entire AI/ML org
- Developed tooling to train natural language understanding models using **Swift** and **SwiftUI**
- Built an interface to save, load, and filter training datasets in **SwiftUI**, allowing users to collaborate on training datasets

Alloy.ai

Software Engineering Intern

San Francisco, CA

May 2019 – Aug 2019

- Built a modal to display related data issues in **React** and **Java**, computing relevancy on **140,000+** documents to reduce engineer triage times
- Implemented monitoring and aggregate reporting of data pipeline timing statistics in Stackdriver using **Python**, tracking **500,000+** files

League

Software Engineering Intern

Toronto, ON

Sep 2018 – Dec 2018

- Implemented statement generation and invoice tracking using **Go** and **MongoDB**, automating tracking of outstanding balances for **100+** clients

Hack the North

Co-Director

Waterloo, ON

Jan 2019 – Feb 2021

- Led a team of **30+** student organizers to organize Canada's biggest hackathon, attended by **1,500+** participants from around the world

Backend Developer

Mar 2018 – Dec 2018

- Designed and implemented an API leveraging QR codes to collect data on activity attendance using **Python**, processing **7,200+** scans

Tulip

Software Engineering Intern

Toronto, ON

Jan 2018 – Apr 2018

- Architected a solution to process refunds through different payment gateways via a unified external API endpoint using **PHP** and **MySQL**

Loblaw Digital

Software Engineering Intern

Toronto, ON

May 2017 – Sep 2017

- Built a custom CMS to publish HTML/CSS-based assets for national fashion brand homepage carousel using **Django** and **PostgreSQL**

Education

University of Waterloo Bachelor of Applied Science, Computer Engineering (With Distinction)

Waterloo, ON

Skills

Languages

Python, Java, JavaScript, SQL, Swift, Go, PHP

Frameworks

FastAPI, Jersey, Ember.js, React, Tailwind, Quarkus, SwiftUI

Tools & Technologies

Git, MySQL, PostgreSQL, Terraform, Docker, AWS, Kubernetes, Retool, Node.js, MongoDB