

# Arist Xu

arist.dev | arist.xu@gmail.com | GitHub | LinkedIn | (647) 769-7127

## SKILLS

---

**Languages:** Python, JavaScript/TypeScript, Java, C/C++, SQL, Racket, Bash, R, HTML/CSS.

**Technologies:** AWS, pandas, NumPy, React, GitHub, Bitbucket, MySQL, Docker, Machine Learning, Firebase.

## WORK EXPERIENCE

---

**ODAIA Intelligence Inc.** — Full Stack Developer Jan 2023 – Apr 2023  
AWS, Python (pandas, pytest), SQL (MySQL) Toronto, ON

- Developed an automated health check system for a machine learning data pipeline that computes and validates key metrics, eliminating manual QA tasks and saving up to **4 hours per project execution**.
- Centralized pipeline health metrics in AWS S3 and communicated real-time updates by creating an interactive Slack App with AWS Lambdas, **increasing project testing speed by 400%**.
- Optimized SQL queries and refined NumPy data types, resulting in up to a **300% increase** in data processing efficiency and up to a **90% reduction** in memory usage.
- Improved speed of data pipeline functions by up to **5x** by migrating imported R libraries to Python.

**Sony Interactive Entertainment** — Software Developer Jan 2022 – Apr 2022  
JavaScript, Python (pytest) Waterloo, ON

- Resolved critical visual defects by rewriting component rendering logic in response to event changes.
- Ensured the functionality and stability of features by writing and executing tests for **3 new visual changes**.
- Improved marketplace recommendations by adding key properties to the store search payload for analytical processing, resulting in more relevant search results.

**Dataraction Inc.** — Software Developer May 2021 – Aug 2021  
JavaScript (Next.js, React), Material UI Toronto, ON

- Generated actionable insights by transforming backend data into readable charts on an analytics dashboard, empowering users to monitor engagement and demographic data across user groups.
- Revitalized the platform's video streaming services by incorporating global state with Redux and reconstructing key components, resulting in heightened responsiveness and functionality.

## PROJECTS

---

**Chrome-GPT** TypeScript (React), Tailwind, Python (Flask, SciPy, Beautiful Soup)  

- Developed a Chrome extension that injects relevant context into Chat-GPT prompts from the current tab, allowing users to efficiently query large webpages and use Chat-GPT to analyze new information.
- Implemented Flask endpoints to scrape webpages and compute vector cosine distances to find relevant text.

**UW Canadian Children's Books Center** TypeScript (React), Firebase  

- Created a frontend carousel with responsive design principles for a book and magazine review platform.
- Enforced security measures by revoking expired Firebase keys on login to block unauthorized users.

## EDUCATION

---

**University of Waterloo** Sep 2020 – May 2025  
Bachelor of Computer Science, Honours with Specialization in Business Waterloo, ON  

- 89.52% Cumulative GPA, President of UWCSA, First Place BDO New Venture Competition.
- Courses: OOP, Database Management, Algorithms, Data Structures, OS, Numerical Computation, HCI.