Yixin (Amanda) Yin

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EDUCATION

University of Toronto   Sep 2022 - 2026
HBSc - Co-op Specialist in Computer Science - Software Engineering, Major in Statistics   *sGPA: 4.0*

Courses: Intro to Comp Sci I and II, Software Design, System Programming, ML and Data Mining, Numerical Analysis, Calculus I and II, Linear Algebra I and II, Probability I and II, Stochastic Process.
Awards: E-Fund Entrance Scholarship (10,000 CAD), DSI Research Scholar (7,200 CAD), Dean's List to date
TAships (Teacher Assistant): W24 CSCA67(Discrete Mathematics), MATA37(Calc 2).

SKILLS

Languages: C/C++, Rust, Java, Python, JavaScript/TypeScript, HTML/CSS, R, SQL, GraphQL.
Tools/Frameworks: Git, Linux, MySQL, MongoDB, Power BI, AWS, React, Scikit-learn, PyTorch, MATLAB, Solr.
Skills: Client-Server Protocol and API Design, Data Modeling, Product Management, Microservices, Kubernetes.

INTERNSHIPS

Microsoft SWE Intern | *Outlook Group, Enterprise Adoption Team. Redmond, WA*   May-Aug 2025
- Integrated legacy **PST** (Personal Storage Table) data into the new Outlook by building a **native-to-web** bridge in **Rust** using MAPI, Win32GQL, and GraphQL to surface local task data in a modern React/TS environment.

StackAdapt SWE Intern | *Planning Forecast Team. Toronto, ON*   Jan-Apr 2025
- Led **full-stack** development of **Geo-Radius Forecasting** (TypeScript, Rails, GQL), including CSV ingestion, input validations, geolocation API integration, backend flow for S3 uploads, and live map UI rendering.
- Wrote a 15-page tech spec, scoped **30+** tickets, and coordinated weekly cross-team syncs for implementation.
- Hosted a **Tech Tune-Up** on SOLID principles for React best practices to elevate frontend standards.

Microsoft SWE and PM Intern | *Outlook Group, Enterprise Adoption Team. Redmond, WA*   May-Aug 2024
- Developed a detailed specification for the Outlook app bar **MRU**(Most Recently Used) apps and intelligent pinning features, including engineering details, user signal definition, and telemetry metrics; reviewed by a team of PMs.
- Implemented the spec by capturing user signals and writing **MRU sorting algorithms** to fetch, update, and query MRU acquisitions. While considering and testing all user edge-cases.
- Optimized the pinning feature by analyzing user behavior to determine the frequency of MRU prompts for pin tips. Checked in my PRs to **Prod** with up to **500** lines of code, to be released once the feature flight is completed.

Scotiabank SWE and ML Research Intern | *Corporate AI/ML Analytics Team. Toronto, ON*   Jan-Apr 2024
- Built a full-stack pipeline to generate unique queryIDs, linking **user signals** such as clicks and views under single user events, and piped the data into MongoDB for storage and analytics purposes.
- Generated a **judgment list** of relevance labels using the **Simplified Dynamic Bayesian Network** click model. Performed **feature engineering** by adding new features to the feature store and logging attribute values in Solr.
- Implemented **LTR (Learn to Rank)** techniques, specifically the **pairwise SVM** method, to boost signals and automate weight generation for features, enhancing search relevance for clients of varied identities and needs.

PROJECTS AND RESEARCH

LLM Quantization Research | *DSI(Data Science Institute), University of Toronto*   May-Sep 2025
- Conducted research on **mathematical methods for weight and activation quantization in LLMs**.
- Developed and evaluated novel quantization techniques, paper in review: *"**Sliced-Wasserstein Distribution Alignment Improves the Ultra-Low-Bit Quantization** of Large Language Models"*.

HackMIT 2024: Axy | *JavaScript, React, Convex (backend), Terra API, Apple Health, ESP-A26 sensor*   @Axy
- Built a **React Native app** using Convex for real-time data management to detect stress from wearable signals.
- Integrated Apple Health and Terra API to collect and analyze wearable data, using AI-driven models to detect behavioral patterns, identify stress triggers, and generate personalized insights and predictions.