

Chun Meng (Amy) Yu

Skills

- Python, C/C++, Java, PHP, JavaScript, SQL
- Computer Graphics, Machine Learning, Generative AI, Software Engineering, Computer Science

Work Experience

- **Purdue University - Research Assistant**

August 2023 – present, West Lafayette, Indiana, United States

- Working with Professor Angus Forbes and Professor Liang He on multiple projects that applies LLMs into real-world tools that help users understand data and improve accessibility.
- First author of a research paper that was accepted by UIST: *FathomGPT: A Natural Language Interface for Interactively Exploring Ocean Science Data*.
- Developing a tool that leverages LLMs to help blind users understand and create 3D models.

- **Meta (Facebook) - Software Engineer (Search Entrypoints Team)**

July 2019 – August 2023, Menlo Park, California, United States

- Worked on Facebook Typeahead to improve search and navigation, along with the Mentions product, achieving significant gains in user engagement.
- Developed models for ranking typeahead suggestions based on entity features.
- Implemented and expanded Structured Typeahead Suggestions to disambiguate between entities with the same name and provide more information to the searcher by decorating typeahead suggestions with images and snippets.
- In charge of Facebook's shortcut feature that allows users to find and navigate directly to Facebook's products. Worked on internal tools to streamline the process of adding new shortcuts, and improved the reliability of shortcut appearing in search suggestions.
- Led the development of the batch mentions feature to allow users to mention all group members at once and send notifications to millions of mentionees.
- Managed and provided mentorship to interns.

- **Facebook - Software Engineering Intern (Data.AI Team)**

Sept 2018 – December 2018, Menlo Park, California, United States

- Worked on Forecaster, an internal tool that extrapolates time-series to find patterns in past data to predict future trends.
- Learned about models and libraries for extrapolating data.
- In a hackathon project, used k-NN to generate related videos recommendations when the user is watching Facebook videos while logged out. Selected for the Judges Choice Award and did a presentation about the project to Facebook's CTO, Mike Schroepfer.

- **Microsoft - Software Engineering Intern (.NET Runtimes Team)**

May 2018 – August 2018, Redmond, Washington, United States

- Independently implemented R2RDump, a command-line tool that parses .NET ReadyToRun binary executables to display assembly code (i.e. a reverse assembler).
- Investigated and learned about low-level assembly code and how binary executables are formatted and compressed.
- Worked on multi-module compilation to allow multiple .NET programs and libraries to be compiled into a single ReadyToRun executable.

- **Cisco Meraki - Software Engineering Intern (MR Access Point Features Team)**
September 2017 – December 2017, San Francisco, California, United States
 - Worked on embedded software for Meraki MR access points that does authentication when it connects to a switchport by sending and receiving EAP authentication packets from the switch.
 - Implemented a security feature that uses the SSCEP protocol for the access point to obtain a signed certificate from the CA server to use as the authentication credentials.
- **IBM Canada - Software Developer Intern (J9 Virtual Machine)**
January 2017 – April 2017, Ottawa, Canada
 - Worked on Project Panama, a new feature for IBM's JVM that allows Java programmers to call C/C++ functions with native method handles (a more secure and user-friendly alternative to JNI).
 - Added new C++ classes to the Java Core Library to implement APIs that create and invoke native method handles.
 - Investigated how to pass arguments and return values of various data types (primitives, pointers, structures) through the runtime stack between Java and native methods.
- **SAP Canada - Software Developer Intern (Core Infrastructure)**
May 2016 – August 2016, Waterloo, Canada
 - Added fingerprint scan functionality to the SAP Kapsel Logon plugin for hybrid mobile development that allows users to unlock apps with a fingerprint instead of a passcode.
 - Independently designed and implemented a tool that maps user-provided JSON data into a HandlebarsJS template.
- **Bank of Canada - Web Developer Intern**
September 2015 – December 2015, Ottawa, Canada
 - Independently developed a WordPress plugin that tracked media usage throughout the five Bank of Canada websites.
 - Wrote PHP scripts and MySQL queries to search and modify tables from a large database.

Education

- Purdue University, West Lafayette
August 2023 – May 2025
 - Master of Science, Computer Graphics Technology
- University of Waterloo
September 2014 – June 2019
 - Bachelor of Computer Science (With Distinction)

Awards and Scholarships

- Term Dean's Honours List
 - Term average of 90.2%
- Jessie W.H. Zou Entrance Scholarship
 - Awarded to a first year female Computer Science student
- University of Waterloo President's Scholarship
 - Awarded to students with admission averages above 90%

<https://acmyu.github.io/>
<https://www.linkedin.com/in/amycmyu/>