William Ma

[linkedin](#)
[williamma.dev](#)
(845) 337–7521
wm274@cornell.edu

I am a software engineer and CS researcher who is eager to dive into every technical detail.
Technical Interests: ML, NLP, iOS, Compilers, CV

Education

Cornell University / Ithaca, NY

2018 – 2022
- M.Eng. Computer Science, GPA 4.3
- B.S. Computer Science, GPA 4.2
  Summa Cum Laude
- Minor in Mathematics

Experience

Bosch / AR & NLP Research Intern

Jun 2022 – Present

HarmonyLang / Systems & PL Research

Sep 2021 – May 2022 [Link]
- Prototyped and researched Harmony Automata
- Implemented Harmony-to-Python transpiler

Low-Resource NER / NLP Research

Jan 2021 – Dec 2021 [Link]
- Researched into few-shot and fine-grained NER
- Experimented with transformer language models in PyTorch

Homebrew / Open-Source Contributor

May 2020 – Aug 2020 [Link]
- Unified 8 brew and brew cask commands
- Added cask support to 3 brew commands
- Added license information to 50% (ct. ~2500) homebrew-core packages

Cornell AppDev / Eatery iOS & Pod Lead

Sep 2018 – Dec 2020 [Link]
- Grew user base by 20% during 2019
- 9,600 MAU, 3,600 DAU
- Contributed over 80 peer-reviewed pull requests

Projects

OceanScene / Real-time Rendering

Spring 2022 [Link]
- Built multi-stage deferred rendering pipeline in OpenGL using C++
- Implemented Tessendorf ocean simulation

Sharm / Systems Research Project

Fall 2021 [Link]
- Implemented, profiled, and benchmarked interpreter and source-to-source compiler
- Wrote and presented academic-style paper summarizing results

TriBlank / NLP Research Project

Spring 2021 [Link]
- Ideated, developed, and experimented on novel approach for three-way entity relation extraction
- Wrote and presented academic-style paper summarizing results

Xi / Compiler

Spring 2020
- Implemented dataflow analysis and optimizations
- Developed comprehensive test suite with unit, performance, and integration testing

Cello Mute / iOS App

2016 – 2018 [Link]
- Independently developed iOS app
- 39K downloads

Skills

- Python, PyTorch, Transformers, Computer Graphics, Swift, iOS App Development