

# William Ma

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## Experience

### **Bosch** / AR & NLP Research Intern

Jun 2022 – Present

### **HarmonyLang** / Systems & PL Research

Sep 2021 – May 2022

- Prototyped and researched Harmony Automata
- Implemented Harmony-to-Python transpiler

### **Low-Resource NER** / NLP Research

Jan 2021 – Dec 2021

- Research into few-shot and fine-grained NER
- Experimented using transformer language models

### **Homebrew** / Open-Source Contributor

May 2020 – Aug 2020

- 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

- Grew user base by 20% during 2019
- 9,600 MAU, 3,600 DAU
- Most prolific contributor to Eatery iOS

## Education

### **Cornell University** / Ithaca, NY

2018 – 2022

- B.S. Computer Science, Summa Cum Laude
- Minor in Mathematics
- M.Eng. Computer Science

## Projects

### **OceanScene** / Real-time Rendering

Spring 2022

- Built multi-stage deferred rendering pipeline in OpenGL using C++
- Implemented Tessendorf ocean sim.

### **Sharm** / Systems Research Project

Fall 2021

- Interpreter and source-to-source compiler
- Wrote and presented academic-style paper summarizing results

### **TriBlank** / NLP Research Project

Spring 2021

- 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

- Independently developed iOS app
- 39K downloads