

# William Ma

<https://github.com/whoiswillma>  
wm274@cornell.edu | (845) 243-0640

## EDUCATION

### CORNELL UNIVERSITY

#### BS, COMPUTER SCIENCE

Expected May 2022 | Ithaca, NY  
College of Engineering  
Dean's List (3 semesters)  
GPA: 4.2

### ARLINGTON HIGH SCHOOL

2014 - 2018 | Lagrangeville, NY

## COURSEWORK

### COMPUTER SCIENCE

Analysis of Algorithms, Object-Oriented Design and Data Structures, Theory of Computing, **Functional Programming**, Discrete Structures

### BUSINESS

Financial and Managerial Accounting, Macroeconomics

### MATHEMATICS

Multivariable Calculus, Linear Algebra

## TECHNICAL SKILLS

### EXTREMELY PROFICIENT WITH

Languages: **Swift**, Java, OCaml  
Tools: Xcode, UIKit, Animations with UIKit, **Core Data**, Core Location, MapKit,  $\text{\LaTeX}$ , Git, Vim, Ubuntu

### HAVE EXPERIENCE WITH

Languages: Objective C, Python, Verilog, HTML, CSS  
Tools: Android Studio, Web Development, Nginx, ESXi VMware

## ACTIVITIES

### GLEE CLUB

Striving for musical excellence, the Glee Club fosters a family of tenors and basses through the creation of memorable, musical moments.

## PROJECTS / IOS

### EATERY FIND EATERIES ON CORNELL'S CAMPUS

Fall 2018 -- Present | iOS Developer / Lead for Eatery

- **Helped grow user base by 20 % over past year**
- **7.2k Monthly Active Users**, 2.5k Daily Active Users
- Architected a large feature: Collegetown Eateries
- Implemented design changes; refactor legacy UI code into more modular components
- Worked on a team with iOS, Android, and backend developers, as well as designers and marketers
- Github: <https://github.com/cuappdev/eatery>
- Technologies: **GraphQL**, Swift 4.2, UIKit, Apollo

### CELLO MUTE THE TOOLS MUSICIANS NEED, ALL IN ONE

Summer 2016 -- Present | Independent iOS App

- **Musicianship App with 37K Downloads**
- Designed both the UI and the icons used throughout the app
- Performed market research on high school community.
- Illustrated marketing material used on the App Store.
- Github: <https://github.com/whoiswillma/Cello-Mute>
- Technologies: **AudioKit**, UIKit animations

### LILOC LIFE BY LOCATION

Summer 2019 | Independent iOS App

- Extensive use of Core Data and related technologies
- Use of custom view controller transitions and animations, both interactive and non-interactive.
- Exploration of location-based APIs.
- Github: <https://github.com/whoiswillma/Lilloc>
- Technologies: **Core Data**, **Core Location**, **NSFetchedResultsController**, Swift 5

## PROJECTS / OCAML

### COURSE SCHEDULER PLAN A CORNELL SEMESTER

Spring 2019 | CS 3110 Project

- Arranges a schedule from chosen courses
- Uses data from Cornell's API to schedule courses
- Select between a distributed or condensed schedule
- Github: <https://github.com/whoiswillma/cs3110-s2019-scheduler>

## PROJECTS / JAVA

### CRITTERWORLD SIMULATING EVOLVING ARTIFICIAL LIFE

Fall 2018 | CS 2112 Project

- Parse arbitrarily complex AST from BNF specifications, apply transformations on the AST
- Coordinate multiple clients over networking API
- Designed a JavaFX GUI application with concurrency to view the state of the UI
- Technologies: **Java FX**, **Java Concurrency and Networking**, **AST Parsing and Interpretation**