

# Benjamin Yi

UNDERGRADUATE · COMPUTER SCIENCE

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## Education

### Brooklyn College

Aug. 2016 - Dec. 2019

B.S. IN COMPUTER SCIENCE

GPA: 3.7

<b>Courses</b>	Data Structures	Software Engineering
	Algorithms	Database Systems
	Theoretical Computer Science	Operating Systems
	Artificial Intelligence	Computer Architecture
	Robotics	Modeling & Simulation

**Languages** Python, Java, C, Swift, Objective-C, Ruby, JavaScript

**Tools** Git, Xcode, Ruby on Rails

## Experience

### Undergraduate Security & Privacy Researcher

May 2016 - Jul. 2016

UNIVERSITY OF MASSACHUSETTS - NATIONAL SCIENCE FOUNDATION

- Tested and proofread a thesis for a hacking mechanism which bypassed graphical user passwords by sniffing unencrypted data from a Bluetooth mouse and replaying the movements of the password using the recorded trajectories of the mouse.
- Refined a scrambled Android keyboard built by the department by improving several UI components using Java and Android Studio.

## Projects

### J.P. Morgan Chase "Code For Good" Hackathon

Oct. 2016

- Designed an application in 24 hours for a non-profit organization, Eden II, that supports the autistic community through extracurricular programs for children as well as adults.
- Improved as a developer in a team environment by communicating with newly acquainted team members to organize project roles and by learning proper workflow technique using Git.
- Designed and built the front-end of an iOS application in Objective-C which provided Eden II caregivers with an interface to record common incoherent words spoken by clients into a database built by a team member, that held unique dictionaries for each individual.

### Gemini, Personal Project

- Architected and built a single-player puzzle game based on a Mahjong tile matching game with a slow tempo similar to Solitaire using Objective-C and Xcode.
- Engineered game logic to update game graphics without additional dependencies or frameworks such as SpriteKit.
- Implemented rules including matching and movement limitations according to the original game.
- Ported original Objective-C codebase to Swift4.

### CISC3320 Operating Systems Group Project

- Tested the cost of context switches by building a program in C, that distributed work across multiple processors using the pthread library and a FIFO scheduling algorithm.
- Observed and compared the performance of context switching between two processors against a single processor by computing the sum of integers stored in a large array.

### CISC3171 Software Engineering Group Project

- Designed and built a restaurant management system using Ruby on Rails.
- Composed a system design report detailing use cases and requirements.
- Built a front-end which provided users with a control panel based on roles such as manager, cook, delivery personnel, and customer.
- Designed several UI components and controls including menus for customers, order summaries for delivery personnel, and employee management panels for managers.
- Implemented a back-end to hold data such as employee roster, order lists, and registered customers.