Benjamin **Yi**

Undergraduate · Computer Science

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Education

Brooklyn College

Aug. 2016 - Dec. 2019

B.S. in Computer Science

GPA: 3.7

Courses

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 using the trajectories to replay the movements of the password.
- Refined an APK called PEK: Privacy Enhanced Keyboard for a scrambled Android keyboard by committing several UI changes in the source code written in Java using Android Studio.

Projects

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

Oct. 2016

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

Gemini, Personal Project

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

CISC3320 Operating Systems Group Project

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

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 their roles, limited to 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.