Andrea Qiu

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EDUCATION

Cornell Tech at Cornell University, New York, NY

Master of Science in Info System in Health Tech

May 2020

Brandeis University, Waltham, MA

Bachelor of Science in Computer Science and Business, cum laude

Dec 2017

SKILLS

Programming Languages: Java, Ruby, Python, HTML, JavaScript, CSS, SQL, C++, R, Scheme **Software**: Git, Eclipse, Sublime Text, ROS, Arduino, Blender, RStudio, Adobe Photoshop

Operating Systems: Mac OS, Linux, Windows

EXPERIENCE

Gateway Biotechnology, Inc., St Louis, MO, Manager of Business Operations and Strategy Jan 2017 - Aug 2018

- Launched company's first nutraceutical which prevents noise-induced hearing loss
- Researched on new business opportunities and marketing strategies for the company
- Constructed company's website

Robotics Lab, Brandeis University, Research Assistant

Sep 2017 - May 2018

- Conducted pilot study called Campus Rover, which aims to deliver packages using robots across the campus
- Investigated obstacle avoidance and indoor navigation using SLAM and PID control in *Python* and C++
- Explored visual fiducial system with *TurtleBot3* and *iRobot Create* on *Robotic Operating System(ROS)*
- Solved line mazes and wall mazes with *mBot* by programming on *Arduino* using *C*

Brandeis University, Teaching Assistant

Jan 2016 - May 2018

- Held weekly office hours to help students in the following courses: Statistics for Economic Analysis, Autonomous Robotics Lab and 3D animation
- Prepared instructional materials and demo's, drafted and graded programming assignments and quizzes

Shanghai Pharmaceuticals Holding Co., Ltd, Shanghai, China, Investment Analyst Intern

Jun – Aug 2017

• Performed due diligence on the deal of the \$1.2 billion acquisition of Cardinal Health, Inc.'s China business

Brain Computer Interface Lab, Brandeis University, Lab Assistant

Jan - May 2017

• Did pattern recognition on Electroencephalography (EEG) data for over 50 test subjects with *Matlab* to distinguish between brain signals produced when subject is engaged versus relaxed as part of PhD research to improve learning quality by monitoring brain activity

PROJECTS

Health Insurance Decoder, Leader (Ruby on Rails, PostgreSQL) Website | Github

Sep - Dec 2017

- Developed a full-stack web application using *Ruby on Rails* with *PostgreSQL*, following test driven development and *Agile* Methodology
- Incorporated techniques including authentication, session, Ajax, RESTful API, RSS feed subscription, automated testing, with PostgreSQL database schema and active record
- Provided estimated out of pocket pay and recommended in-network healthcare providers covered by Brandeis University student insurance plan based on the self-diagnostic results returned by API calls
- Performed market analysis and obtained NSF I-Corp funding in Nov 2017

UNIX Emulator, Programmer (Java, UNIX) Github

Sep-Dec 2016

- Achieved concurrent and asynchronous commands and pipeline-like input/output redirections by developing a basic Unix-like shell with multi-threaded programming techniques
- Provided a standard seek/read/write interface by designing a simulation of UNIX File System
- Implemented inodes and single, double and triple indirect blocks to support large files

Campus Navigation App, Leader (HTML5, JavaScript, CSS, mongoDB) Github

Jul - Dec 2015

- Lead a team of 4 to build a full-stack web-based campus navigation app called Discover Deis using *HTML5*, *JavaScript*, *CSS* with *MongoDB*, under the framework of Meteor
- Presented Business plan for the project and won SPARK Award sponsored by Brandeis University in Feb 2016, as well as support from Microsoft BizSpark Program in March 2016