



# Wesley Wei Qian

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## Education

**Brandeis University** | Waltham, MA

Bachelor of Science in Computer Science and Neuroscience

**SEP 2013-MAY 2017**

Dean's List:

**FALL 2013, SPRING 2014, FALL 2014, SPRING 2015, FALL 2015**

GPA: **3.95 / 4.00**

Award: **Phi Beta Kappa Junior Recipient, Jerome A. Schiff Fellowship**

## Experience

**UBER SOFTWARE ENGINEERING INTERN | SAN FRANCISCO, CA**

**JUN 2015-PRESENT**

- ▶ Work in the Mobile Infrastructure team at Uber to support in house mobile developers and the release team to ensure the development efficiency as well as the app quality on millions' phones
- ▶ Create and design an internal tool for mobile developers to investigate UI test failures on Uber's Continuous Integration platform in full speed by aggregating and synchronizing logs and videos.
- ▶ Engineer in full stack with React.js front-end and Python/Go back-end

**MACHINE LEARNING RESEARCH INTERN | BRANDEIS UNIVERSITY**

**MAY 2015-PRESENT**

- ▶ Conduct interdisciplinary research in computer science, biology and linguistic using statistic machine learning and deep learning approach with Professor Pengyu Hong at Brandeis University
- ▶ Optimize automatic graph feature extraction algorithm and apply the model in biology domain involving proteins, where we derive features using neural network technique
- ▶ Implement computational linguistic models using deep learning framework and other statistical tools to match sentences in the same conversational context
- ▶ Selected as Jerome A. Schiff Fellow for the innovation in biology and machine learning

**UNDERGRADUATE TEACHING ASSISTANT | BRANDEIS UNIVERSITY**

**SEP 2014-PRESENT**

- ▶ Gave review sections for intro & advanced java, data structure & algorithm, computer program structure and interpreter to go over tough topics and answer students' questions
- ▶ Hold weekly office hours for individual student discussion and wrote JUnit test for code grading

**GOOGLE CODEU PARTICIPANT | MOUNTAIN VIEW, CA**

**MAR 2015-AUG 2015**

- ▶ Participated CodeU, an exclusive dev program for high potential students to strengthen their skills
- ▶ Completed Udacity's Developing Android Apps course, and worked with three other participants to create a contact transfer Android Application that transfers users' contact and social platform info with NFC or QR Code using Android Beam API, ZXing Project and Parse backend in two weeks
- ▶ Presented the application at Google Tech Corner and won the runner-up for Engineer's Choice

**PHOTOGRAPHER | HARVARD SEED**

**NOV 2013-SEP 2014**

- ▶ Member of Harvard SEED on Citizenship and Social Innovation
- ▶ Create photo-based magazine project; take and edit photos for events

**RACIAL MINORITY SENATOR | BRANDEIS UNIVERSITY**

**SEP 2013-MAY 2014**

- ▶ Elected to represent racial minority students (50% student body) in the Student Union
- ▶ Created videos showing differences in cultures and hold poetry slam in social justice
- ▶ Implemented sustainability initiatives in dining halls campus-wide

## Skills

**Programming skills in** Java, Python, MATLAB, Go, C, JavaScript, and **proficient with** Node.js, React.js, AngularJS, MongoDB, PSQL. **Experience in** Distributed System (Paxos, Spanner etc), Android Development, Statistical Machine Learning, Deep Learning, Bioinformatic and Neuron Modeling.

**Familiar with** Aperture, Photoshop and Lightroom. **Enjoy** photograph, biking and equestrian.

## Projects

### RESTAURANT REVENUE PREDICTION | KAGGLE

APR 2015

- ▶ Predicted restaurant revenue for TFI, the company behind some of the world's most well-known brands including Burger King and compete with other data scientist on Kaggle
- ▶ Utilized linear regression, regression tree, fit ensemble, support vector machine package in MATLAB
- ▶ **Rank 38th (<2%) among 2257 teams from all over the world**
- ▶ Github project: <https://github.com/WesleyC/RestaurantRevenuePrediction>

### JEEVES | BRANDEIS UNIVERSITY

JUL 2014-AUG 2014

- ▶ Created Jeeves, an Android voice-powered virtual assistant for everyday routines
- ▶ Focused on conversational dialogue and provided user a natural interaction with the app
- ▶ Crafted with JavaScript, HTML, CSS, news/weather/gmail API, Bootstrap, AngularJs and PhoneGap
- ▶ **Runner-Up of AVIOS Mobile Speech Application Contest 2015**
- ▶ Github project: <https://github.com/arikalfus/Jeeves>

### AUTOMATIC SPATIAL PATTERN EXTRACTION | BRANDEIS UNIVERSITY

SEP 2015-PRESENT

- ▶ Apply a pattern recognition machine learning model and innovate a new way to match proteins in their tertiary(three dimension) structure instead of their primary(linear) structure
- ▶ Preprocess biology data, specifically protein crystal structure data from protein data bank
- ▶ Tune and customized a pattern extraction model with high throughput protein data using parallel computing techniques and a robust EM algorithm to handle the high diversity in protein sequence
- ▶ Train protein sequence with skip gram algorithm to generate vector representation for amino acids

### CONTACT TRANSFER | MOUNTAIN VIEW, CA

JUL 2015-AUG 2015

- ▶ Created a contact transfer Android Application that transfers users' contact and social platform info in a quick manner using NFC or QR Code
- ▶ Worked with Android Beam API for NFC support, ZXing Project for QR code support and Parse backend in Android Studio
- ▶ **Presented the application at Google Tech Corner and won the runner-up for Engineer's Choice**
- ▶ Github project: <https://github.com/WesleyC/ContactTransfer>

### DEMANDWARE FIELD PROJECT | BURLINGTON, MA

SEP 2015-DEC 2015

- ▶ Research, propose and test solutions and features to enhance in-store shopping experience by bridging internet and physical store with Demandware
- ▶ Develop two mobile application, Android and iOS, to do a proof of concepts on some emerging technologies like beacons (notification and triangulation location), Google Indoor Map, etc
- ▶ Github project: <https://github.com/BrandeisXDemandware>

### FOR MORE

- ▶ <https://github.com/WesleyC>

## Courses

- ▶ Intro/Advanced Java Programming in object oriented programming
- ▶ Data Structure and Algorithm Design
- ▶ Computer Program Structure and Interpreter
- ▶ **Statistical Machine Learning**
- ▶ **Operating System**
- ▶ **Database Management Systems**
- ▶ **Distributed Systems**