

# SHARON S. KIM

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## EDUCATION

**Wellesley College**, Wellesley, MA  
*Bachelor of Arts Candidate in Computer Science*  
Cumulative GPA: 3.41/4.0

Expected May 2018

**Massachusetts Institute of Technology**, Cambridge, MA  
*Cross-registered student*  
Cumulative GPA: 5.0/5.0

September 2017 - Present

## RELEVANT EXPERIENCE & PROJECTS

### 6.805: Foundations of Internet Policy (MIT course)

September - December 2017

*Final policy research paper and proposal (Grade: A+)*

- Our proposal involves digital identity verification, which requires efforts by government and social media platforms such as Facebook to combat fake news, preserving digital democracy and free and anonymous speech online.
- Currently submitting to journals such as Stanford Technology Law Review and the Journal of Technology Law & Policy.

### Braintree Payments Software Engineering Internship, Chicago, IL

Summer 2017

*Software Engineering Intern on Team Search*

- Using Ruby on Rails, wrote tests and code ensuring the Gateway's forward compatibility with Elasticsearch 5.x.
- Created new Elasticsearch 5.x clusters using Hiera, Puppet, and bash commands.
- Wrote a Rewinder that would catch data inconsistencies between output from Kafka to the Elasticsearch loader.
- Intern project included integrating the Braintree SDK with the AR (Augmented Reality) Tool Kit. When an Android phone camera is pointed at a cue, a product appears (for example, a piece of furniture), allowing the customer to view the product in their home. When the product is clicked, it can be purchased using the Braintree transaction flow.

### Radhakrishnan Lab: Computational Chemistry, Wellesley, MA

Summer 2016

*Summer Research Award Recipient and Research Intern*

- Performed  $\Delta G$  calculations and charge optimizations on both the wild-type and mutant forms of two chronic myeloid leukemia-treating drugs to evaluate their efficacy in electrostatic binding using computational methods that numerically solve the Poisson-Boltzmann equation.
- Used GROMACS, a molecular dynamics simulation software, to computationally model the drugs in an aqueous environment to obtain more accurate  $\Delta G$  calculations and charge optimizations as a function of time.
- Performed component analyses of the drugs to evaluate which parts of each drug could be further optimized.
- Created a poster and gave a presentation on the research topic to an academic and corporate audience.
- Gave weekly research paper presentations to the lab about a research topic in the field that interested members.

## TECHNICAL EXPERIENCE

**Languages:** Python, Racket, Java, SML, C, JavaScript, HTML/CSS, Perl, Ruby

## LEADERSHIP & ADDITIONAL EXPERIENCE

### MIT Symphony Orchestra, Harvard College Opera, Cambridge, MA

Spring 2016 - Present

*Concertmaster*

- Served as the highest chair in the first violin section for both ensembles in various semesters. Seating followed a rigorous audition process, with rehearsals meeting at least once a week for at least three hours.

### Chamber Music Society, Wellesley, MA

Fall 2015 - Spring 2016

*Treasurer*

- Ensured the organization was adequately funded for performances and volunteer and outreach events.

### National Youth Orchestra of the USA, White Plains, NY

Summer 2014

*2<sup>nd</sup> principal violinist*

- Toured the U.S. in a sponsored program by Carnegie Hall and the Bloomberg Foundation with violinist Gil Shaham.