# **ANEESH KHERA**

# **Backend Developer**









aneesh.khera@berkeley.edu

#### **EDUCATION**

# **University of California, Berkeley**

B.A. Computer Science | GPA: 3.84

Expected May 2018

**Relevant Coursework**: Efficient Algorithms, Artificial Intelligence, Discrete Math and Probability, Data Structures, Computer Programs, Linear Algebra and Differential Equations

#### **EXPERIENCE**

### **Upsilon Pi Epsilon**

Berkeley, CA Sep 2016 - Present

# **Web Developer**

- Maintain and improve website: http://upe.cs.berkeley.edu/
- Developing a past events feature for the site in order to help students gain access to recruiter information and view highlights; Django, HTML/CSS

#### **Code for India**

Berkeley, CA Sep 2016 - Present

#### Infosys

Bangalore, India Jun 2016 - Aug 2016

### **Backend Developer**

 Currently designing the backend of a web application to help educational NGOs analyze student academic performance; Django

### **Software Engineering Intern**

- Developed the backend of an optimization engine for CSX Transportation to efficiently approximate the NP-hard job shop scheduling problem; Java
- Implemented a shifting bottleneck heuristic as a part of the algorithm to minimize overall tardiness of factory locomotive repair and maximize individual station usage
- Solved the  $1 | r_j | L_{max}$  scheme with a branch and bound algorithm that reduced time complexity from O(n!) to  $O(n^2 \log n)$
- Read and updated data from a SQL server; delivered output in the form of a Gantt chart; reduced existing makespans by over 37 hours for the average CSX job shop

#### CS61A

Berkeley, CA Jan 2016 - May 2016

#### Course Lab Assistant

- Taught students programming fundamentals in python, scheme, and SQL during labs
- Helped students gain a better understanding of coding concepts such as recursion, inheritance, and abstraction

#### **SKILLS • TECHNOLOGIES**

**Proficient** Python, Java, Rails, Scheme, Swift, Git, LaTeX **Familiar** SQL, HTML/CSS, JavaScript, Bootstrap, Django

#### **PROJECTS**

**Dress Me**Web application that suggests outfits based on a user's wardrobe, daily schedule, and weather;

utilized the OpenWeatherMap, geopy, and google calendar APIs; implemented features to monitor laundry and give suggestions on clothing to buy/donate; Django, HTML/CSS, jQuery

**Bench Blog** Web application for bloggers to create personalized feeds on sports news; promotes blogging

during matches with in-games statistics; Rails, HTML/CSS

**Text Editor** Fully functional text editor, very similar to Notepad; implemented various data structures such

as Doubly Linked Lists and Stacking Arrays in order to optimize time efficiency for cursor and

text display; utilized JavaFX libraries; Java

**Bear Maps**Web mapping application that parses location and routing data from XML, and rasters a front-

end image from data stored in a quadtree; A\* search to route shortest path between locations

and a Trie to autocomplete location searching; replication of Google Maps; Java