ANEESH KHERA

aneeshkhera.me
github.com/kapleesh
aneesh.khera@berkeley.edu

Education

University of California, Berkeley, *Bachelors in Computer Science* **Expected May 2018**
GPA: 3.84 | Upsilon Pi Epsilon: CS Honor Society

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

Experience

Infosys, *Software Engineering Intern* **Jun 2016 - Aug 2016**

- Developed the backend of an optimization engine for the client, CSX Transportation, to efficiently reduce the intermission time for locomotives in maintenance factories; primarily used Java
- Implemented a shifting bottleneck heuristic to approximate the NP-hard job shop scheduling problem
- Solved the $1 \mid r_j \mid L_{max}$ scheme with a branch and bound algorithm that significantly improved time complexity from $O(n!)$ to $O(n^2 \log n)$; utilized a preemptive earliest due date rule in order to minimize lower bound checks
- 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, *Academic Intern* **Jan 2016 - May 2016**

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

Keck Medicine of USC, *Software Analyst Intern* **Jun 2014 - Aug 2014**

- Learned a computational biology software, MITOsym, to analyze liver mitochondria
- Utilized MATLAB to create functional models, formulate oxygen intervals, and perform regression analysis
- Trained fellow lab researchers to use relevant data to construct large-scale graphs and predictive charts

Skills

Programming: Java, Python, Scheme, iOS/Swift3, Ruby, SQL, JavaScript, MATLAB,
Frameworks/Web: Django, Rails, HTML/CSS
Software: Git, LaTeX, Excel, Xcode

Projects

Dress Me | Django, HTML, CSS, JavaScript

- Built a 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 recommend clothes to buy/donate based on user habits

UPE Calendar | Django, HTML, CSS

- Worked to improve the website: http://upe.cs.berkeley.edu/
- Developed a Past Events feature using data from Facebook event pages to give students access to recruiter information and view highlights from previous info-sessions

Bench Blog | Rails, HTML, CSS

- Built a web application for bloggers to create personalized sports feeds
- Designed to promote blogging during matches with in-game statistics

Text Editor | Java, JavaFX Libraries

- Created a fully functional text editor, very similar to Notepad
- Implemented various data structures such as Doubly LinkedLists and Stacking Arrays to optimize time efficiency for cursor, text display, and word wrapping