

ANEESH KHERA

aneeshkhera.me

github.com/kapleesh

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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 approximate the NP-hard job shop scheduling problem; primarily used 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 $1 \mid r_j \mid L_{\max}$ scheme with a branch and bound algorithm that 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 (comfort level in parentheses)

Languages: Java (5/5), Python (5/5), Scheme (4/5), iOS/Swift3 (3/5), SQL (3/5), MATLAB (3/5)

Frameworks/Web: HTML/CSS (4/5), Django (3/5), Rails (3/5), JavaScript (2/5)

Software: Git (4/5), LaTeX (4/5), Excel (3/5), Xcode (3/5)

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

UPE Calendar | Django, HTML, CSS

- Worked to improve the website: <http://upe.cs.berkeley.edu/>
- Developed a Past Events feature 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 and text display