

ANEESH KHERA

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github.com/kapleesh

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Education

University of California, Berkeley, *Bachelors in Computer Science*

Expected May 2018

GPA: 3.75 | Upsilon Pi Epsilon: CS Honor Society
Regents' and Chancellor's Scholarship Candidate

Relevant Coursework: Database Systems (in progress), Machine Structures (in progress), Efficient Algorithms, Artificial Intelligence, Data Structures, Structure of Computer Programs, Discrete Math and Probability, Linear Algebra and Differential Equations, iOS Development, Ruby on Rails

Experience

Infosys, *Software Engineering Intern*

Jun 2016 - Aug 2016

- Developed the back-end of an optimization engine to efficiently reduce the intermission time for railway locomotives in maintenance factories; primarily used Java
- Implemented a shifting bottleneck heuristic to approximate the NP-hard job shop scheduling problem
- Solved the $1 | r_j | L_{\max}$ scheme with a branch and bound algorithm that improved deliverable speeds by 50%
- Wrote scripts to process data from a MySQL database and visualize output in the form of a Gantt chart; reduced existing makespans by over 37 hours for the average 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 process and analyze liver mitochondrial data
- 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, C, 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

Text Editor | Java, JavaFX Libraries

- Created a fully functional text editor, implementing features such as scrolling, undo, and redo
- Designed various data structures such as Doubly Linked Lists and Stacking Arrays to optimize time efficiency for the cursor, text display, and word wrapping

Bench Blog | Rails, HTML, CSS

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

Bear Maps | Java, AWT

- Developed a Google Maps of the Berkeley area that parses location and routing data from XML and rasters a front-end image from data stored in a quadtree
- Utilized A* search to route shortest path between locations and a Trie to autocomplete location searching