ANEESH KHERA

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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
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

Experience

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

- Developed the back-end of an optimization engine 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 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, 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