ANEESH KHERA

Backend Developer

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EDUCATION

University of California, Berkeley Expected May 2019
B.A. Computer Science | GPA: 3.84

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

EXPERIENCE

Upsilon Pi Epsilon — **Web Developer**
Berkeley, CA
Sep 2016 - Present
- Maintain and improve website: http://upe.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 — **Backend Developer**
Berkeley, CA
Sep 2016 - Present
- Currently designing the backend of a web application to help educational NGOs analyze student academic performance; Django

Infosys — **Software Engineering Intern**
Bangalore, India
Jun 2016 - Aug 2016
- Developed the backend of an optimization engine for CSX Transportation to efficiently solve 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 $1 \mid r_j \mid L_{max}$ 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 — **Course Lab Assistant**
Berkeley, CA
Jan 2016 - May 2016
- 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 moniter 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