LOIS HO

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OBJECTIVE

Interested in an internship opportunity in front-end and/or back-end development for summer 2016.

EDUCATION

University of California, Berkeley   Expected May 2017
B.A. in Computer Science
- CS186 Database Systems
- CS169 Software Engineering
- CS170 Efficient Algorithms and Intractable Problems
- CS188 Artificial Intelligence
- CS61B Data Structures and Advance Programming
- CS61C Computer Architecture (Machine Structures)

EXPERIENCE

SOFTWARE ENGINEERING INTERN| SmileyGo   March 2016 – Present
- Launching new products for data-driven philanthropy platform to empower corporations to give smarter
- Working in a team of 6 to build reviews, ratings, and endorsements page with Ruby on Rails
- Incorporated TDD and BDD testing including Rspec and Cucumber tests—runs automated acceptance tests
- Two week iterations following Scrum, an Agile methodology

IT HELPDESK SYSTEM ADMINISTRATOR| UC Berkeley IRIS/EECS Department   August 2014 – Present
- Troubleshot and diagnosed computer problems and facilitated DHCP connectivity
- Registered and updated systems in IRIS/EECS domain; performed inventory on software
- Assisted clients with excellent operational understanding of the technical support structure within EECS

SKILLS

- **Languages:** Python (5/5), Java (3/5), Ruby (3/5), SQL (2/5)
- **Web**: HTML (4/5), CSS (3/5), Ruby on Rails (3/5), JQuery (2/5)

PROJECTS

PERSONAL WEBSITE| http://loisbess.com
- Built this website from scratch using HTML, CSS, and JavaScript/jQuery

TRANSACTIONS| Python
- Implemented a concurrency control manager which coordinates simultaneous transactions while preserving data integrity
- Specifics include protocols for Strict Two-Phase Locking and Deadlock Detection

PERFORMANCE OPTIMIZATION AND MAPREDUCE | Python
- Performed optimization of the evaluation of a convoluted neural network that classifies 32 x 32 images into 10 categories and find those that contain cats; speed up by a factor of 12x. Optimized this app through loop unrolling, vectorization, parallelization, SIMD instructions, and OpenMP to parallelize computations.
- Used MapReduce programming model to optimize the training of classifiers in the convoluted neural networks.

GRAPH PACKAGE| Java
- Developed a graph package to provide methods for manipulating graphs that used traversals, such as breadth-first search, depth-first search, A* search, and Dijkstra's algorithm
- Allowed Trip-finder client to use the package to find the shortest distance with directions from a start and end point