# **BOB FENG**

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#### **Education**

#### UNIVERSITY OF CALIFORNIA, BERKELEY

B.A. Computer Science

Class of 2019 Major GPA: 3.46

Relevant coursework:

- CS160 UI & UX (Html, CSS, JavaScript/JQuery)
- CS162 Operating Systems (C, Assembly, MIPS)
- CS168 Internet Architecture (Python)
- CS70 & 170 Discrete Math/Algorithms (Java)
- CS186 Database Systems (Java, SQL)
- CS188 Artificial Intelligence (Python)

## **Projects**

Database Spring 2017

Database Management System

- Implemented a DBMS that handles constant length records and utilizes data structure such as B+ trees to quickly organize pages and increase efficiency in data retrieval.
- Utilize knowledge of memory access patterns to design time-efficient query operators including Grace Hash Join and Sort Merge Join that take advantage of spatial locality to quickly process information.

Pacman Fall 2016

Artificial Intelligence Agent

- Designed AI agents that preform complex search tasks such as maze navigation and location inference utilizing algorithms such as Kruskal's algorithm and Bayesian Nets.
- Employed AI and machine learning techniques such as expectimax and minimax, model-free reinforcement learning algorithms, probabilistic inference using hidden Markov models, and perceptrons.

Bear Maps Spring 2016

Web Mapping Application

- Developed a fully functional web mapping application utilizing open source, real-world mapping data that supports zooming in and out, finding optimal directions, and searching for specific locations.
- Maximized efficiency in path finding by exploiting efficient search algorithms such as the A\* Search and Dijkstra's algorithm.

#### **Experiences**

# **CS61A Course Staff**

*Spring 2016 – Fall 2016* 

Lab assistant and Tutor

- Tutored students one on one about topics such as object oriented programming, recursion, and run time.
- Paired up with one struggling student and assisted him in organization and studying over the semester.
- Guided students through pre-designed labs on topics that ranged from syntax to tree recursion.

# **Kabam Case Competition**

Fall 2016

Finalist

- Gathered, processed, and developed an algorithm to analyze statistics assessing potential for growth of mobile gaming industry for countries to determine the optimal area for further expansion.
- Preformed market analysis to identify a market expansion strategy that results in the highest profit.

# **Organizations**

### PBL - Berkeley Phi Beta Lambda

Fall 2016 - Current

Consulting Committee Chair

- Worked on a project team dedicated to using tech solutions in order to improve existing resources including a custom-built wiki, user portal, application system and various operational algorithms.
- Preformed case studies of companies and developed new marketing and branding strategies focused on increasing revenue and decreasing costs.

Proficient Coding Languages: Python, Java, Html, CSS, JavaScript/JQuery, SQL, and MIPS.

Skills: LaTeX, Github, Make, Cloud9, and Search Engine Optimization.