BOB FENG

bjfeng@berkeley.edu | (909) 282-2498 | 2310 Fulton Street, Berkeley, CA 94704 | www.bob-feng.com

Education

UNIVERSITY OF CALIFORNIA, BERKELEY *Class of 2019 (Senior)*

B.A. Computer Science

Relevant coursework:

- Web Design, UIUX
- Security & Operating Systems
- Efficient Algorithms & Intractable Problems
- Networking & Internet Architecture
- Graphics & Imaging
- Database Management Systems
- Artificial Intelligence & Machine Learning
- Computational Biology

Projects

Security (Python) *Spring 2018*

Secure File Systems

- Designed a filesystem that ensures confidentiality, integrity, and authenticity using CBC-AES symmetric key and el Gamal asymmetric key encryption as well as MAC and RSA for signatures respectively.
- Enabled a sharing and revoking feature in the filesystem through a distributed security layout that prevent malicious agents from accessing any information being transferred.

Ray Tracer (C++) *Summer 2018*

Physically-based Renderer

- Able to render images with full global illumination, using a probabilistic estimate of infinite light bounces.
- Improved the efficiency of ray-mesh collision using a bounding volume hierarchy acceleration structure.
- Created support for complex materials like glass and mirrors as well as BRDF's for microfacet materials.
- Added the option to support depth of field using a virtual thin-lens in front of the camera.

PintOS (C) *Fall 2017*

Operating System

- Added efficient thread functionality such as non-busy waiting and priority scheduling utilizing synchronization variables like semaphores, locks, and condition variables.
- Implemented syscall functionality that maintained ACID standards to prevent against failure.

Organizations

Innovated Design *Fall 2018-Current*

Web Team

- Preformed user research to identify flaws and improve user experience in accessibility and usability.
- Redesigned websites for on-campus clients, drawing from UI UX principles and user research.

PBL – Berkeley Phi Beta Lambda *Fall 2016 – Spring 2018*

Tech Team

- Developed an algorithm based on simulated annealing to schedule events for maximum attendance.
- Created interactive front-end website to host the generated tabling schedules for club-wide use.

Experiences

Boalt Library Staff *Spring 2018 – Current*

Lab Technician

- Aided law students in any technical issue whether that's in setting up software for WiFi use, printing server access, queuing up for the print queue, and printer system maintenance.

CS61A Course Staff *Spring 2016 – Spring 2017*

Lab Assistant and Tutor

- Tutored struggling students in wide ranging topics from recursion to objected oriented programming.

Coding Languages: Python, Java, C, C++, C#, HTML, CSS, JavaScript, JQuery, and SQL

Other Proficiencies: Git, OpenGL, LaTex, Unity, MIPS, GDB, OOP, Data Structures

Random Interests: Skiing, Longboarding, Movies, Astronomy, and Pen Spinning