David Hahn

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EDUCATION

University of California, Berkeley – College of Engineering
B.S. Electrical Engineering and Computer Science, 2017

EMPLOYMENT

Apple Inc. – Cupertino, CA Summer 2016
Software Development Intern for Human Engineering Team
- Created web-app from scratch capable of dynamically displaying user data on both mobile, desktop platforms
- Extended existing front-end libraries to create UI interactions not normally possible with base code
- Improved UI, restructured back-end models, and further developed API's to enhance UX of existing tools
- Engineered with Django, Javascript, jQuery, HTML

ServiceNow – San Francisco, CA Summer, Fall 2015
Software Development Intern for PaaS Team
- Modernized SW-upgrade monitor to provide metrics detailing progress, record changes, and node availability
- Integrated new visual features on front-end monitor page with existing back-end architecture
- Refactored unstable J-Unit tests and faulty usages of internal I18N library
- Engineered with Java, Javascript, HTML, AngularJS, MySQL

Aerospace Corporation – El Segundo, CA Summer 2014, Winter 2014 - 2015
Satellite Development Intern for AFSCN Expansion Project
- Developed a CubeSat prototype to interface with Aerospace satellite control network software
- Constructed webpage GUI to process user commands and display graphical sensor data in real-time
- Implemented back-end architecture to handle satellite control and store temperature, solar, and GPS data
- Engineered with C, Java, Python, MySQL, HTML, and JavaScript/JQuery

PROJECTS

Computational Photography Project Series (CS194-26) Fall 2016
- Generated hybrid images, blended images using Gaussian and Laplacian stacks (bit.ly/cs194-26-p3-aco)
- Wrote face morphing procedure via affine transforms on Delaunay triangulations (bit.ly/cs194-26-p5-aco)
- Implemented image pyramid for aligning images split along R, G, B channels (bit.ly/cs194-26-p1-aco)

ARLISS Mars Rover Competition – Javascript Fall 2014 - 2015
- Implemented reliable parachute-release logic using GPS data that worked despite failures of other components
- Designed procedure for getting out of ditches without using infrared, sonar, and other distance sensors
- Won Berkeley 2014 Space Hackathon with curved leg design for optimal performance on uneven terrain

PintOS Feature Development (CS162) - C Spring 2016
- Re-wrote existing naïve thread-scheduling system to use the load-balancing MLFQS algorithm
- Implemented file operation syscalls to give user the ability to read, write, create, remove, and open files
- Built an inode-based file system and cache to allow extensible files and improve file R/W performance

COURSEWORK

Computer Security (Fall 2016) [CS161]
Operating Systems [CS162]
Internet Architecture and Protocols [CS168]
Discrete Mathematic, Probability Theory [CS70]
[CS194-26] Image Manipulation (Fall 2016)
[CS170] Efficient Algorithms
[CS188] Artificial Intelligence
[CS61b] Data Structures

SKILLS AND INTERESTS

Proficient with Python, C, Java
Interests in tennis, volleyball, violin