David Hahn

949.375.5733 ● davidhahn@berkeley.edu ● Bellevue, WA

EDUCATION

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

EMPLOYMENT

Microsoft – Redmond, WA   Summer 2017 - Present
Backend Software Engineer for Azure Active Directory MSODS Team
- Designed and implemented features for data sync services between on-premise, cloud, and partner directories
- Implemented on-premise sync feature to block soft-match and enable quarantining of cloud admin identities
- Developed infrastructure to report company deletions to MSFT partner teams for GDPR compliance effort
- Extended back-end to support renaming previously immutable initial domain granted to customers on sign-up
- Created bug fixes and quality of life improvements for on-call engineer experience
- Engineered with C#, .NET, ADLDS

Apple Inc. – Cupertino, CA   Summer 2016
Full Stack 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
Full Stack 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 [https://ddavidhahn.github.io/]

Flocking Simulation (CS184) – C++   Spring 2017
- Implemented visually organic flocking simulation based on paper by Craig Reynolds
- Developed features to influence unit behavior including obstacles, mouse interactions, and predator units
- Tuned flock unit behavior to emulate fish and predator unit behavior to emulate sharks
- Repurposed previous project code to create responsive UI for unit tracking and analysis and user interactions

Computational Photography Project Series (CS194-26) – Python, Numpy   Fall 2016
- Implemented a panorama generator capable of automatically stitching together three projective images
- Generated hybrid frequency images and blended images together using Gaussian and Laplacian stacks
- Emulated tilt-shift lens effect programmatically, making the image subjects appear miniature
- Wrote face morphing procedure via affine transforms on Delaunay triangulations
- Implemented alignment algorithm to coalesce separate B&W images for R, G, & B channels into color image

SKILLS AND INTERESTS

Proficient with Python, C++, Java, C#   Interests in photography, volleyball