Charles **Hager**

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EDUCATION

UC BERKELEY
May 2019 | Berkeley, CA
Cum. GPA: 3.627 / 4.0

ELECTRICAL ENGINEERING
& COMPUTER SCIENCE
College of Engineering
Major GPA: 3.88 / 4.0

MINOR IN MECH ENGINEERING
College of Engineering
Minor GPA: 3.74 / 4.0

LINKS

Github: // clhager
LinkedIn:// charles-hager-914b54135

SKILLS

In order of experience:
Java • C • Python • MIPS • C#
SQL • MATLAB • x86 • Git • LaTeX
Web Dev:
JS • Bootstrap • Angular • Node
CAD and other software:
Unity3D • Maya • SolidWorks
El. Engineering:
Microcontrollers • Oscilloscopes
Multimeters • Sensors • Soldering

COURSEWORK

EL. ENG & COMPUTER SCIENCE
- Structure & Interpretation of Computer Programs
- Data Structures
- Computer Architecture
- Internet Architecture
- Efficient Algorithms and Intractable Problems
- Discrete Mathematics & Probability
- Information Devices and Systems I
- 3D Modeling and Animation

MECH ENGINEERING
- Thermodynamics
- Statics and Mechanics of Solids
- Physics for Engineers

ENGINEERING
- MATLAB Programming for Engineers
- 3D Visualization for Design
- 3D Modeling for Design

EXPERIENCE

HAAS BUSINESS SCHOOL | Software Developer
August 2017 - Present | Berkeley, CA
MEAN • Bootstrap • Angular • Node • Google Scripts
- Working on the Haas D&P Student Engineering team to build a web app and analytics framework for classes at Haas
- Built a MEAN web app for an economics assignment collecting 20 rounds of data from 300 students
- Developed a RESTful Node.js module for communicating large amounts of data between Node, Google Sheets, and MongoDB

WENLIN | Web Developer
May 2017 - August 2017 | Berkeley, CA
Javascript • Apache • MySQL • GitLab
- Developed new graphic features for the Wenlin website (Chinese/English online dictionary)
- Used SVG graphics and Javascript to render Chinese character stroke fanning

PERSONAL PROJECTS

16-BIT COMPUTER
Logisim • Java
- Used the design software Logisim to develop a 16-bit CPU
- Developed a dedicated assembly language and binary machine code
- Supports the function call stack, recursion, structs
- Project page: clhager.github.io/projects

STUDENT GROUPS

GOLDENEYE ENGINEERING TEAM
August 2017 – Present | Berkeley, CA
OpenCV • Arduino
- UCB Autonomous Vehicle Team working on testing and research
- Working on lane detection using OpenCV
- Testing object detection using Kinect depth sensing and OpenCV
- Testing and developing coursework for ME 131 (Prof. Borrelli)

OPEN COMPUTING FACILITY
August 2017 – Present | Berkeley, CA
- Working on the open source OCFWeb code for the OCF website

COMPUTER SCIENCE UNDERGRADUATE ASSOCIATION | Officer
August 2017 – Present | Berkeley, CA
- Hosting office hours at the CSUA office
- Helping to facilitate industry recruiting events at UCB

BERKELEY HYPERLOOP (BLOOP)
January 2015 – August 2017 | Berkeley, CA
SolidWorks • Fusion360
- Competed at the SpaceX Hyperloop competition in Hawthorne
- Wrote the UCB Hyperloop design log, detailing the features and design of the pod and worked on the construction of the pod