John Allard Jr. | Resume

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Education

University of California, Santa Cruz	**B.S. Computer Science**
Junior, Graduation in June, 2016. 3.63 GPA	*2014 - Pres.*
Glendale Community College	**Computer Science, Physics**
Undergraduate Requirements, 3.75 GPA	*2011 - 2014*

Work Experience

Research

Harvey Mudd College	**Computer Science Department**
REU Intern	*6/14 - 9/14*

Developed software to localize an actor in an environment using 3D models, statistical techniques, and computer-vision algorithms.
Mentor : Professor Zachary Dodds
Repository : `https://github.com/jhallard/3DLocalization`

Jet Propulsion Laboratories	**Human-Robot Interfaces Laboratory**
Intern	*9/13 - 1/14*

Worked on topics related to human-computer interfaces, including bioelectric-signal processing and speech recognition.
Mentor : Dr. Adrian Stoica
Repostories : `github.com/jhallard/BioSig-for-Android`
          `github.com/jhallard/QuadCopter-Voice-Commands`

Employment

Self Employed	**Greater Los Angeles Area**
Tutor of Mathematics, Physics, and Computer Science	*12/11 - 6/14*
Glendale Community College	**Departments of Physics, Mathematics**
Supplementary Instruction Tutor	*9/11 - 9/13*

Personal Projects

PadSync	**8/14 - Pres.**
A Computing Network for Simple Home Customization.	*Currently In Development*

PadSync is a home computing network that provides a simple, intuitive, and consistent interface for controlling the various electronic devices around a user's living area.
- Website : `jhallard.github.io/PadSync`
- Repository : `https://github.com/jhallard/PadSync` (currently private)

DataStructures	**11/14 - Pres.**
A Collection of Data Structures, Implemented in C++	*Currently In Development*

This project contains a grouping of templated implementations for some of the more common data structures, like heaps, trees, maps, and graphs.
- Repository : `https://github.com/jhallard/DataStructures`

CVFeatureFinder	**7/14 - 8/14**
Performs Feature Detection, Description, and Matching Between Image Frames.	*Almost Completed*

This project utilizes the Open Computer Vision (OpenCV) libraries to perform comparisons between sets of images.
- Repository : `https://github.com/jhallard/CVFeatureFinder`

PointCloudProcessor	**6/14 - 8/14**
Simplifies the Creation and Processing of PointClouds using a Kinect Camera.	*Work Postponed for Now*

This project streamlined the task of reading data from a Kinect camera and using it to build a 3D point-cloud object in real time.
- Repository : `https://github.com/jhallard/PointCloudProcessor`

PhySim	**4/13 - 6/13**
Simulates Physical Phenomena Encountered in a College-Level Physics Course.	*Work Postponed for Now*

The goal of the project was to allow a user to simulate various phenomena encountered in an undergraduate-level physics course.
- Repository : `https://github.com/jhallard/PhySim`

Computer Skills

Advanced: C++, C, LaTeX, UNIX, GIT, ARDUINO, RASPBERRY PI

Intermediate: OPENCV, BOOST, MATLAB, OPENGL, ANDROID, POINT CLOUD LIBRARY, PYTHON, JAVA, EXCEL

Basic: PHP, JAVASCRIPT, HTML