Danny Fann

312 Burlington Common – Santa Ana, CA 92704
(714) 722 2381 • ☎ (714) 962 3318 • ✉ danny.k.fann@gmail.com • dannyfann.com

Education

The University of California, Irvine **GPA: 3.0**
Computer Science, Bachelors of Science *August 2015*

The University of California, Irvine
Public Health Science, Bachelors of Science *June 2014*

Projects

3D Reconstruction with Structured Lighting
- Reconstructed a 3D model of a mannequin lit with structured lighting in MATLAB by decoding gray-coded images and triangulated 3D point clouds with the recovered pixel coordinates.
- Merged multiple 3D meshes with Poisson Reconstruction in MeshLab to create a 3D PLY model.

RFID Reader
- Programmed an ATmega32 microprocessor in C to receive UART signals from the RFID reader, handle card identification, and trigger a relay to open an electric strike lock.

Connect-K AI
- Assisted in coding an AI in C++ for a Connect-K game module that utilized IDS to predict opponent moves and act accordingly.
- Programmed AI's ability to compute adjacent pieces and determine the value of a given board.
- Wrote documentation explaining the features implemented in the AI.

SDL Game Engine
- Programmed collision detection and physics component of game engine in C++ that handled sprites and projectiles.

Languages and Technologies

Languages:: Java (Intermediate), Python (Intermediate), C++ (Intermediate), MATLAB (Intermediate), Javascript (Basic)

Technologies:: HTML (Intermediate), CSS (Intermediate), Meteor.js (Basic)

Experience

Edwards Lifesciences **Irvine**
Advanced Materials and Technology R&D Intern *June 2015 - Present*
- Created Installation Qualification/Operation Qualification protocol and Software Validation protocol for validating the laboratory's Instron Testing Machine.

Edwards Lifesciences **Irvine**
Advanced Technology R&D Intern *May 2013 - September 2013*
- Assisted in glutaraldahyde fixing for bovine aortic roots that were used for device testing that simulated aortic insufficiency.
- Modeled sizers in Pro-E that were used for pullout testing of the Helio device.

Edwards Lifesciences **Irvine**
Transcatheter Heart Valve R&D Intern *June 2011 - May 2013*
- Compiled data for understanding device testing rationale and provided possible steps for moving forward with the development of the Embrella Device.
- Performed flow model particulate testing for Embrella Device on pulsatile flow model and provided ways to improve the device's particulate deflection efficacy.

Edwards Lifesciences **Irvine**
Heart Valve Therapy R&D Intern *May 2010 - September 2010*
- Created and submitted GLX Rabbit Calcification Study - Zero Time Protocol which showed that glutaraldehyde fixed tissue experienced significantly less calcification in comparison to other tissue fixing methods.
- Ran x-ray imaging on implanted and explanted GLX tissues for pre- and post-operative analyses.