Danny Fann

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Education

The University of California, Irvine
Computer Science, Bachelors of Science, GPA: 3.0 *September 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 triangulating 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 an RFID reader, handle card identification, and trigger a relay to open an electric strike lock.

Connect-K AI
- Collaborated with a team member to code an AI in C++ for a Connect-K game module that utilized IDS to predict an opponent's possible moves and act accordingly.
- Developed AI's ability to compute the value of a game board based on piece adjacency and positioning.

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

Languages and Technologies

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

Technologies: HTML (Intermediate), CSS (Intermediate), Meteor.js (Basic), jQuery (Basic), MongoDB (Basic), Express.js (Basic), Angular.js (Basic) Node.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 Embrella's testing rationale and provided 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.