

# Danny Fann

312 Burlington Common – Santa Ana, CA 92704

☎ (714) 722 2381 • 📠 (714) 962 3318 • ✉ danny.k.fann@gmail.com • dannyfann.com

## Education

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**The University of California, Irvine**  
*Computer Science, Bachelors of Science*

**GPA: 3.0**

*June 2014 - August 2015*

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

*September 2010 - June 2014*

## Projects

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### Connect-K AI

- Helped code an AI in C++ for a Connect-K game module that utilized IDS and alpha-beta pruning to predict opponent moves and act accordingly.
- Programmed AI's ability to compute adjacent pieces and determine the value of a given board.
- Wrote the 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.
- Implemented rudimentary game design used in game engine demonstration.

### RFID Reader

- Assembled an RFID reader that scanned a card and unlocked an NO electric strike lock if the card ID was accepted.
- 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.

### 3D Reconstruction with Structured Lighting

- Reconstructed a 3D model of a mannequin lit with structured lighting by decoding gray-coded images and triangulated a 3D mesh with the recovered pixel coordinates.
- Converted the reconstructed point cloud into a .ply model that could be imported into a 3D rendering program such as Maya or Blender.

## Languages and Technologies

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

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

## Experience

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### Edwards Lifesciences

**Irvine**

*Advanced Materials and Technology 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 glutaraldehyde fixing for bovine aortic roots that were used for device testing that simulated aortic insufficiency.
- Modeled sizars 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 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.