

# Jennifer Chih-Yuan Su

8700 Baltimore Ave, #204, College Park, MD 20740  
Phone: (240) 413---5251 Email: [suyuanyuan2013@gmail.com](mailto:suyuanyuan2013@gmail.com)  
Link to my LinkedIn Account: <http://tinyurl.com/ChihYuanSu>

## Education

### University of Maryland

ME, Bioengineering

College Park, MD

Expected May 2015

### National Yang-Ming University

BS, Biomedical Engineering

Taipei City, Taiwan

June 2013

## Work Experience

### Center for Bioinformatics and Computational Biology

University of Maryland, College Park

Research Assistant

July 2014 – now

- Statistically analyzed data in choosing appropriate K-mers for the highest quality of RNA alignment with specialized R scripts / BASH scripts
- Evaluated RNA splicing in UNIX environment with RNAseq Analysis tools
- Performed the results by statistical models and plots for weekly presentation

### Yourgene Bioscience Co.

New Taipei City, Taiwan

Intern Engineer & Bioinformatic Programmer

July 2012 – July 2013

- Developed and Applied c/c++ programs to improve the average length of contigs and contig coherences of mate pairs sequencing
- Worked as a lab team member to prepare short---read DNA fragments for Illumina
- Evaluated the development of Bio-Information Technology and authored reports

## Project Experience

### Coronary Artery Stent Design & Analysis

Oct 2014 – Dec 2014

- Used CERO to develop 316L Stainless Steel artery stent made of that prevents stroke with higher biocompatibility and corrosion resistance
- Programed an animated artery expansion by pressure and thermal simulation

### Tissue Engineered OPF Heart Valve Using 3D Printing Technology

Feb 2014 – May 2014

- Proposed a solution to enhance tissue engineered heart valve with 3D printing techniques
- Wrote 10 page research report in FDA medical publication form

### Cardiomyocyte Differentiation on Crosslinked Collagen Scaffold

July 2011 – June 2012

- Established image system to analyze scaffold construction with Matlab
- Demonstrated iPS cells differentiation to cardiomyocyte on collagen scaffold by controlling the concentration of EDC/NHS

### Embedded System: Direct Memory Access (DMA)

December 2012

- Designed DMA controller with focus in optimizing the codes to gain efficiency

## Relevant Skills

**Programming Languages:** R (main), SQL, C/C++, Matlab, Perl, Python, Verilog

**Computer Skills:** Unix, Bowtie, Salmon, CREO (CAD), Microsoft Office

**Languages:** Chinese

## Leadership Experience

Outside Campus Institution Visit: Main Organizer

Spring 2012

- Held a visit to Industrial Technology Research Institute and United Orthopedics Co. for Biomedical Students to help students know industry development
- Coordinated with representatives in cooperation, students and professors

2<sup>nd</sup> Cross-Strait Medical Student Communication and Cooperation: Activity Organizer

Spring 2011

- Held the open ceremony, academic forum and farewell party during 2011 Medical Communication
- Coordinated with other activity group from other medical schools