

# Jin-Hwa (Joey) Chiu

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## EDUCATION

**M.S. Mechanical Engineering | National Chiao Tung University (NCTU) | Hsinchu, Taiwan** 2013-02/2016

Relevant courses: Finite Element Methods, Signals and Systems, Design of Innovation and Design Around, Reliability Engineering, Surface Science and Engineering, Variational Mechanics, Mechanics of Composite Materials, Introduction to Computers and Programming

**B.S. Mechanical Engineering | National Chiao Tung University (NCTU) | Hsinchu, Taiwan** 2009-2013

Relevant courses: Intermediate Mechanic of Materials, Automatic Control, Energy Technology, Computer Programming

## EXPERIENCE

**Engineer at R&D Production Center, TSMC** 09/2016-Present

- Develop a product defect image recognition by Machine Learning
- Enrolled in Machine Learning Training Program
- Monitor and maintain N7/5/3 STI/IMD/ILD CMP by EBARA's equipment system
- Analyze the process ability and improve the process stability by altering the equipment construction

**Mechanical R&D Engineer, ASUSTek COMPUTER INC** 07/2016-08/2016

- Designed shielding frames of ZenFone3(ZE520KL)

**Cooperative Postgraduate, Institute of Physics, Academia Sinica** 12/2013-12/2014

- Studied mechanics of the biochemical material and fabrication of Hydrogel spheres by Micro-channels
- Assisted in constructing and designing equipment components with visiting scholars and research assistant

**Product Designer, Healing Science and Creativity Contest of University System of Taiwan** 12/2012-11/2013

- Designed the product appearance and mechanism of our new technology bracelet by Solidworks software
- Simulated the drop test in ABAQUS and ANSYS Mechanical

**Participant, Young Entrepreneurs of the Future - YEF** 02/2013-08/2013

- Organized a business model with various background teammates to earn venture capital
- Studied medical healthcare business projects to perform a marketing project

**Table-Tennis Athlete, Varsity Table-Tennis Team of NCTU** 09/2009-06/2012

- Represented NCTU to attend several table-tennis competitions in Taiwan

## RESEARCH PROJECTS

**Torque Analysis of Darrieus Vertical Axis Wind Turbine with Wind Guiding Panels** 01/2015-02/2016

- Used FLUENT software to analyze the lift/drag force of airfoil by fluid simulation
- Designed a new Darrieus Vertical Axis Wind Turbine with wind guiding panels by Solidworks
- Analyzed torque of the Darrieus Vertical Axis Wind Turbine by changing relative angle of incoming wind

**Fabrication of Uniform Hydrogel Spheres by Micro-fluidic Channels** 07/2014-12/2014

- Create a method of abundantly fabricating hydrogel spheres with uniform size
- Construct a 3D tissue scaffold by hydrogel spheres

**Measurement of Mechanical Properties of Gelatin Standard Samples** 02/2014-08/2014

- Establish a standard procedure of measuring Young's and Storage modulus of a standard gelatin samples

## SKILLS

### Computer Skills

- Proficiency in programming languages & statistical data processing software - Python, Django, C, Excel
- Web Design by Django framework, Bootstrap (HTML5, CCS3, Bootstrap)
- Proficiency in engineering graphic data presentation software - Solidworks, ProE
- Proficiency in structural and mechanical analysis software - ANSYS Mechanical, APDL, ABAQUS
- Proficiency in fluidic analysis software - FLUENT, CFX, ICEM CFD

### Languages

- Mandarin (mother tongue)
- English (TOEFL IBT: Total 89)

## AWARDS & CERTIFICATES

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- (edX)MITx: 6.00.2x Introduction to Computational Thinking and Data Science
- (Coursera)University of Michigan: Using Python to Access Web Data
- (Coursera)University of Michigan: Using Databases with Python
- (Coursera)University of Michigan: Python Data Structures
- (Coursera)Peking University: C程序设计进阶
- (Coursera)Microsoft: DEV210x Introduction to C++
- (edX)MITx: 6.00.1x Introduction to Computer Science and Programming Using Python
- Second prize, Healing Science and Creativity Contest of University System of Taiwan
- Certificate, YEF Entrepreneurial Workshops

## LEADERSHIP

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**Vice-President**, Mechanical Engineering Department Table-Tennis Team of NCTU

2011-2013

- Organized various training programs for team members