

# Chung-Hau Wang

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## EDUCATION

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<b>University of Southern California (USC)</b> , Los Angeles, CA	Dec 2013
Master of Science, Mechanical Engineering (Specialized in Control and Design)	
<b>Chen Kuo Professional Education Institute</b> , Taichung, Taiwan	2008-2010
Student, Chinese Medicine	
<b>National Chung Cheng University (CCU)</b> , Chiayi, Taiwan	2007
Bachelor of Science, Mechanical Engineering	
<b>Moscow Aerospace School's 2005 Program</b> , Russia	Sep 2005

## TECHNICAL SKILLS

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SolidWorks, CATIA, MatLab, AutoCAD, C++, Java, Android, Visual Basic, Linux, Python, Verilog, and MS Office

## WORK EXPERIENCE

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### Associate Engineer

**Industrial Technology Research Institute (ITRI)**, Hsinchu County, Taiwan (R.O.C) May 2016-Present

- Established and managed Taiwan's 1<sup>st</sup> Robot Laboratory; Assisted in legislating on Taiwan's robotic standards

### Junior Manufacturing Engineer

**Meritek Electronics Corp.**, Baldwin Park, CA Feb 2015-May 2016

- Ensured smooth manufacturing/assembling process; Promoted the management system by 60% of efficiency

### Volunteer

**Aminggo Lu Tech**, Arcadia, CA Feb 2014-Feb 2015

- Assisted the engineers in hardware and software maintenance

### Grader for Engineering Vibrations

**USC**, Los Angeles, CA Jan 2013-May 2013

- Corrected the students' homework and guided the students in academic learning

### Directing Officer (Military Service)

**Level A Ordnance Repair Depot, Combined Logistics Command, DOD**, Taiwan Jul 2007-Jun 2008

- Managed the repair technicians and maintained the armament (rifle, artillery, telescopes, etc.)

## HONORS & AWARDS

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**Taiwan Patent** (Patent No: M506597)

This patent is about a wheelchair of all-terrains

**First Place** (Work Name: Running Chair) Oct 2006

**2006 Taiwan Innovative Mechanism Design Competition** (National Science Council of Taiwan sponsored)

This project was to modify wheelchairs' mechanism and function to make them more ergonomic

- Led the team to design the prototype and the mechanism, and determined the configuration

**Finalist** (Work Name: Swift-Cart)

Sep 2006

**The 7<sup>th</sup> International Creativity-in-Action Contest for University Student** (National Science Council of Taiwan sponsored)

This project was to add functions to shopping carts to make them more functional and user-friendly

- Led the team to design the prototype and the mechanism, and determined the configuration

**Finalist** (Work Name: Reusable Chop-Pen-Sticks)

Sep 2006

**The 7<sup>th</sup> International Creativity-in-Action Contest for University Student** (National Science Council of Taiwan sponsored)

This project was to combine chopsticks and pens to create more functions and quality of convenience

- Led the team to design the prototype and determined the coating paint material

## PROJECT EXPERIENCE

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### Manual Wheelchair for All-Terrains

This project is to design an ergonomic manual wheelchair for all-terrains

- Designed the prototype with SolidWorks and simulated the wheelchair with 3D printers

### Toothpaste Dispenser Design Challenge from Apple Inc.

This project is to design an automatic toothpaste dispenser dispensing with constant volume and without drips

- Designed the prototype and configuration of the toothpaste dispenser

### Regenerative Speed Reducer (RSR)

This project is to design a device to recycle the energy from vehicles

- Led the team to design RSR and analyzed RSR by FEA with SolidWorks and CATIA

### Computer-Aided Design of Mechanical Systems

This project is to apply FEA to analyzing different models with SolidWorks and CATIA

- Analyzed stress/strain problems, vibration systems, and thermal stress/strain problems

### SpaceBot

This project is to design a Geosynchronous (GEO) satellite life-extension vehicle

- Determined SpaceBot's parameters and evaluated the feasibility of the project

### Da Vinci's Flyer

This project is to reconstruct Da Vinci's flyers

- Designed the Da Vinci's flyers, determined their parameters, and simulated the flyers with SolidWorks

### Vibrating Systems

This project is to analyze and simulate the vibrations of lump-mass systems and continuous systems

- Modeled, analyzed, and simulated vibration systems with MatLab

## EXTRACURRICULAR ACTIVITIES

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Taiwanese American Chamber of Commerce - Young Career Adult Group

2014-2016

Club of Initiative Design & Engineering

CCU, 2004-2007

## ADDITIONAL INFORMATION

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Languages:

Native in Mandarin/Taiwanese, Fluent in English