

# 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, Visual C++, Java, Visual Basic, Python, Verilog, and MS Office

## WORK EXPERIENCE

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### Quality Control Engineer

<b>Meritek Electronics Corp.</b> , Santa Fe Springs, CA	Feb 2015-Present
· Detected the products, debugged for the system faults, and helped in assembly of the products	

### Volunteer

<b>Aminggo Lu Tech</b> , Arcadia, CA	Feb 2014-Feb 2015
· Repaired computer's hardware and assisted the engineers in software maintenance	

### Grader for Engineering Vibrations I

<b>USC</b> , Los Angeles, CA	Jan 2013-May 2013
· Corrected the students' homework and guided the students in academic learning	

### Directing Officer (Military Service)

<b>Level A Ordnance Repair Depot, Combined Logistics Command, DOD</b> , Taiwan	Jul 2007-Jun 2008
· Managed the repair technicians and maintained the armament (rifle, artillery, telescopes, etc.)	

## HONORS & AWARDS

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<b>Taiwan Patent</b> (Work Name: Manual Wheelchair for All-terrains)	Pending
This patent is about a wheelchair of all-terrains	

<b>First Place</b> (Work Name: Running Chair)	Oct 2006
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### 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

<b>Finalist</b> (Work Name: Swift-Cart)	Sep 2006
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**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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### **Toothpaste Dispenser Design Challenge from Apple Inc.**

This project is to design a toothpaste dispenser for assembly manufacturing line

- Conceived the concept and designed the prototype and configuration

### **Regenerative Speed Reducer (RSR)**

This project is to design a device to collect and transform vehicle's kinetic energy to electrical power

- Led the team to design the prototypes and configurations, and to determine the components' materials
- Analyzed the model by finite element analysis (FEA) with SolidWorks and CATIA

### **Computer-Aided Design of Mechanical Systems**

This project is to analyze different models by FEA with SolidWorks and CATIA

- Analyzed the stress/strain and their distributions, the vibration natural frequencies and the corresponding vibration modes, the buckling boundary conditions, and thermal stress/strain for different models

### **SpaceBot**

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

- Determined the required propellant masses, scales of SpaceBot and its subsystems
- Evaluated the feasibility and the cost for the whole project

### **Da Vinci Flyer**

This project is to reconstruct Da Vinci's flyer

- Designed the model and determined the flyer's scales, flying modes, and the feasibility with SolidWorks

### **Modeling and Analyzing Vibrating Systems**

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

- Modeled and analyzed a suspension system model of automobiles and a model of airplane wings with mounted engines with MatLab

## EXTRACURRICULAR ACTIVITIES

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Taiwanese American Chamber of Commerce - Young Career Adult Group	2014-Present
Club of Initiative Design & Engineering	CCU, 2004-2007
Club of Taijiquan (a soft Chinese martial arts)	CCU, 2003-2007

## ADDITIONAL INFORMATION

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Languages:	Native in Mandarin/Taiwanese, Fluent in English
Interests & Hobbies:	Taijiquan (10-year formal training), Chinese martial arts, sports, Chinese calligraphy, reading, and traveling (visited England, France, Russia, Singapore, Vietnam, Japan, the US)