**Chung-Hau Wang**
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## EDUCATION

**University of Southern California (USC),** Los Angeles, CA — Dec 2013
Master of Science, Mechanical Engineering (Specialized in Control and Design)

**Jian Guo Educational Institution for Chinese Medicine,** Taichung, Taiwan — 2008-2010
Student, Chinese Medicine

**National Chung Cheng University (CCU),** Chiayi, Taiwan — 2007
Bachelor of Science, Mechanical Engineering

**Moscow Aerospace School's 2005 Program,** Russia — Sep 2005

## TECHNICAL SKILLS

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

## WORK EXPERIENCE

**Grader for Engineering Vibrations I**
**USC,** Los Angeles, CA — Jan 2013-May 2013
- Corrected the students' homework

**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.)

## PROJECT EXPERIENCE

**Regenerative Speed Reducer (RSR):**
This project was 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 determine the components' materials
- Analyzed the model by finite element analysis (FEA) with SolidWorks and CATIA
- Earned A level grade in the class

**Computer-Aided Design of Mechanical Systems**
This project was 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
- Earned A level grade in the class

**SpaceBot**
This project was 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
- This project passed a stringent test

**Da Vinci Flyer**

This project was to reconstruct Da Vinci's flyer

- Designed the model and determined the flyer's scales, flying modes, and the feasibility with SolidWorks
- This project passed a strict examination

**Modeling and Analyzing Vibrating Systems**

This project was 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
- This project passed a stringent test

## HONORS & AWARDS

**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
- Earned the First Place at 2006 Taiwan Innovative Mechanism Design Competition (Sponsored by the National Science Council of Taiwan)

**Finalist** (Work Name: Swift-Cart) Sep 2006

**The 7th 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
- Earned the Finalist at The 7th International Creativity-in-Action Contest for University Student (Sponsored by National Science Council of Taiwan)

**Finalist** (Work Name: Reusable Chop-Pen-Sticks) Sep 2006

**The 7th International Creativity-in-Action Contest for University Student**

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
- Earned the Finalist at The 7th International Creativity-in-Action Contest for University Student (Sponsored by National Science Council of Taiwan)

## EXTRACURRICULAR ACTIVITIES

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|---|---|
| Club for Initiative Design & Engineering | CCU, 2004-2007 |
| Club of Taichi (a soft Chinese martial arts) | CCU, 2003-2007 |

## ADDITIONAL INFORMATION

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