

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)	
Chen Kuo Professional Education Institute, 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

Volunteer

Aminggo Lu Tech, Arcadia, CA	Feb 2014-Present
Grader for Engineering Vibrations I	
USC, Los Angeles, CA	Jan 2013-May 2013

- Corrected the students' homework and guided the students in 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.)	

HONORS & AWARDS

Taiwan Patent	Pending
This patent is to protect a wheelchair of new type	
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 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	
Finalist (Work Name: Reusable Chop-Pen-Sticks)	Sep 2006
The 7th 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

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

Taiwanese American Chamber of Commerce - Young Career Adult Group

2014-Present

Club for Initiative Design & Engineering

CCU, 2004-2007

Club of Taijiquan (a soft Chinese martial arts)

CCU, 2003-2007

ADDITIONAL INFORMATION

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)