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

Quality Control Engineer

Meritek Electronics Corp., Santa Fe Springs, CA — Feb 2015-Present

- Debugged for the product's functional and physical error, and maintained the manufacturing machinery

Volunteer

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

- Repaired computer's hardware and assisted the engineers in software maintenance

Grader for Engineering Vibrations I

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

Taiwan Patent (Work Name: Manual Wheelchair for All-terrains) — Pending

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 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

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

Taiwanese American Chamber of Commerce - Young Career Adult Group 2014-Present

Club of Initiative Design & Engineering CCU, 2004-2007

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)