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, Linux, Python, Verilog, and MS Office

WORK EXPERIENCE

Associate Engineer

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

- Established and managed Robot Laboratory; Assisted in legislating on Taiwan's robotic standards

Junior Manufacturing Engineer

Meritek Electronics Corp., Baldwin Park, CA — Oct 2015-May 2016

- Upgraded the manufacturing management system; Increased the manufacturing efficiency by 60%

Quality Control Engineer

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

- Managed the operators, improved the manufacturing process, and maintained the machinery and tools

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

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 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

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 a toothpaste dispenser for manufacturing line

- 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

Taiwanese American Chamber of Commerce - Young Career Adult Group 2014-2016

Club of Initiative Design & Engineering CCU, 2004-2007

ADDITIONAL INFORMATION

Languages: Native in Mandarin/Taiwanese, Fluent in English