DAVID CHON, E.I.T.

[Torrance, CA][310.381.9716][dchond@gmail.com]

Education

University of California, Riverside, Riverside, CA Graduation Date: **March 2016**
Bachelor of Science in Mechanical Engineering
- Coursework: Mechanics of Materials, Linear System and Control, Feedback Control, Vibrations, Kinematic and Dynamic Analysis of Mechanisms, Transport Phenomena, Robotic Planning and Kinematics, Mechanical Behavior of Materials, Machine Design

Engineer-in-Training, Board for Professional Engineers Issued: **December 29, 2016**
California License, EIT-160156

Highlights

- Proficient in Mill and Lathe Techniques, Catia, AutoCAD, C++, HTML5, CSS, JavaScript, Adobe Photoshop, Adobe Lightroom, Adobe Illustrator
- Highly skilled in Microsoft Word, Excel, PowerPoint, Stress and Strain Analysis, SolidWorks, MATLAB, Sound Engineering Techniques
- Fluent in Korean

Experience

Stanford Center on Longevity: Design Challenge (Senior Design) **September 2015 – March 2016**
UC Riverside, Bourns College of Engineering, Riverside, CA
- Designed and manufactured a spring knee device to support elderly in their daily activities
- Supervised a team of three in the approach to a solution phase and prototype construction phase
- Developed a physical prototype using the mill, lathe, band saw, CNC machine, 3D printer, and welding equipment

Kinematic and Dynamic Analysis of Mechanisms Final Project **April 2015 – June 2015**
UC Riverside, Bourns College of Engineering, Riverside, CA
- Implemented a GUI in MATLAB for kinematic simulation over entire range of motion of a four bar linkage and slider crank system
- Developed an animation of the mechanism for specified input conditions
- Analyzed the static and dynamic forces on each member, which will be displayed in the GUI

Robotics Planning and Kinematics Final Project **September 2014 – December 2014**
UC Riverside, Bourns College of Engineering, Riverside, CA
- Created MATLAB code that accurately plans the path of the robot and checks for collision

Feedback Control Final Project **April 2014 – June 2014**
UC Riverside, Bourns College of Engineering, Riverside, CA
- Utilized MATLAB to create an active car suspension and draw Bode plots, Nyquist Criterion, and Root Locus
- Designed PID control/tuning to ensure passenger comfort by minimizing the amplitude and duration of oscillations

Machine Design Project **April 2014 – June 2014**
UC Riverside, Bourns College of Engineering, Riverside, CA
- Led a team of four to plan, construct, and analyze a straw bridge
- Constructed a bridge which resulted in a predicted failure load of 3.402 kg, 27.4% error, and 850% strength to weight efficiency
- Utilized SolidWorks and conducted tests to confirm the point of failure and load failure with calculated results

Accomplishments

Volunteer **March 2011 – Present**
Los Angeles Regional Food Bank, Gardena, CA
- Lead a small team to distribute canned goods and groceries for families of low income
- Assist in coordinating logistics and distribution

Church Web Developer/Management **September 2010 – Present**
Arise Reformed Church, Gardena, CA
- Develop and manage the church website using HTML, CSS, and JavaScript

Church Sound Engineer/Worship Leader **September 2006 - Present**
Arise Reformed Church, Gardena, CA
- Ensure live sound equipment is set up properly and in working condition
- Check sound quality and make adjustments when needed

Affiliations

Active Member, American Society of Mechanical Engineers (ASME), UC Riverside **Sept 2011 – March 2016**