Jennifer Choi

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EDUCATION

California State University, Fullerton **May 2020**
Bachelor of Science, Mechanical Engineering Fullerton, CA

Relevant Coursework: Mechanical Design, Mechanical Vibrations, Vibrations and Mechanical Control Systems, Acoustics and Noise Control, Rigid Body Dynamics, Heat Transfer, Thermodynamics, Mechanics of Materials, Kinematics of Mechanisms

SKILLS

CAD: Solidworks, AutoCAD
Software/Programming: MATLAB, Simulink, Microsoft Office Suite
Languages: Korean, English

EXPERIENCE

Titan Rover **May 2019 – May 2020**
Robotics Member Fullerton, CA

- Collaborated with multi-disciplinary teams to develop and build a multi-terrain Mars rover to compete in the Mars Society's University Rover Challenge
- Designed and performed finite element analysis on the end effector for a telescopic robotic arm structure
- Developed and distributed detailed weekly reports to team members
- Incorporated additive manufacturing methods to enhance product development and prototyping

CSU Fullerton Formula Society of Automotive Engineers **Jan 2019 – May 2019**
Undergraduate Member Fullerton, CA

- Designed and implemented vehicle body safety systems to meet driver protection safety requirements

Cod.Ed Education Corporation **May 2018 – Jan. 2019**
Instructor Fullerton, CA

- Mentored students in computer science and programming fundamentals using Javascript to develop custom Alexa capabilities
- Collaborated with instructors to create and implement a computer science curriculum for 20-30 students

North Orange County Community College District **Aug. 2015 – Aug. 2016**
Cypress College – Learning Resource Center (LRC) Cypress, CA
Student Assistant

- Established and maintained positive communication between students, departments, and top management to an exceptional level

PROJECTS

ARMORS – Automatic Response Man-Overboard Rescue System **Jan 2020 – May 2020**

- Conducted research for a graduate thesis on the efficacy of an autonomous lifeboat
- Developed the dynamical model for directional thrust control of a dual-propeller vectoring lifeboat

EV3 Lego Race Car Project **Feb 2019 – May 2019**

- Designed and inspected chassis and differential systems for an obstacle-clearing racecar to achieve fastest lap-time
- Embedded an EV3 application to control the drivetrain dynamics of the vehicle

Inverted Slider-Crank Linkage **Feb 2019 – March 2019**

- Developed equations for advanced motion kinematics and utilized MATLAB to understand linkage paths and constraints to drive a piston

Motorcycle Shocks **Jan 2019 – May 2019**

- Designed adjustable dual-collar motorcycle shocks to control spring stiffness
- Designed a dual-concentric spring to control shock response
- Developed analysis methods to analyze the mechanical vibrations of the system