Julia Elisse Javier

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EDUCATION

University of Michigan, Ann Arbor – College of Engineering **Expected Graduation Date: May 2016**
Pursuing Bachelor of Science in Mechanical Engineering
California Academy of Mathematics and Science (CAMS) **Class of 2012**
Cumulative GPA: 3.85/4.00

HONORS/AWARDS

- U of M Center for Engineering Diversity and Outreach ScholarPOWER Rising Student Achievement Award – 2014
- University of Michigan Jean Fairfax Scholarship Award – 2012-2016
- South Central Scholar – 2012-2016, Lifetime Alumni
- Carson Women's Club Academic Scholarship – 2012-2016

EXPERIENCE

Product Engineering Intern – Nexteer Automotive, Core CEPS Group **May 2014 – August 2014**
- Developed a new skewed worm gear set through contact pattern, durability, lash/backdrive, and zoning analysis.
- Investigated the effects of thermal conditioning and torque degradation due to initial work input on worm gears.
- Evaluated the accuracy and precision of worm zone analysis methods from different Nexteer departments.
- Designed and implemented a new test stand fixture for optimal use.

Undergraduate Research Assistant – University of Michigan, Design Heuristics Laboratory **September 2012 – Present**
- Analyzed the effects of Design Heuristics in concept generation and development in engineering product design.
- Developed emergent coding schemes based on context-dependent data and investigated frequencies of heuristics used.

Transportation Planning Intern – Port of Long Beach **July 2, 2012 – August 23, 2012**
- Outlined the Port's process of reviewing and implementing a Transportation Management Plan.
- Compiled and analyzed traffic count data to pinpoint critical traffic locations in the Harbor District using Microsoft Excel.
- Applied TransCAD in order to estimate traffic volumes of future Port activity.

RELATED PROJECTS

EPS Driven – Nexteer Automotive **May 2014 – August 2014**
- Project Manager – delegated assignments, led meetings, and established and managed project budget.
- Designed and manufactured a racing go-kart awarded First Place and Fastest Car in the EPS Driven Race 2014.

Design and Manufacturing I – University of Michigan **September 2013 – December 2013**
- Lead CAD operator and manufacturing engineer.
- Established and managed project schedule and budget.

ACTIVITIES

Society of Women Engineers **September 2013 - Present**
- College Relations Chair and SWE/TBP Career Fair Receptions Chair for the 2014-2015 school year.
- Responsible for planning large scale SWE events and student organization recruiting events.
- Elite Member status from participating in multiple subcommittees, receiving the second most participation points.
- Designed publicity material for many SWE events that increased sales and event attendance.

Center for Engineering Diversity and Outreach **September 2013 - Present**
- Mentor for first year undergraduate student in the M-STEM program.

Michigan Hybrid Racing Team **September 2012 – May 2013**
- Chief liaison for obtaining automotive parts, design review presenter, and assignment delegator.
- Mechanical Division Front Wheel Drive member.

Michigan Research Community (MRC) **August 2012 – May 2014**
- Presenter at the 2013 MRC Spring Research Symposium.
- MRC mentor to incoming undergraduate freshmen.

BLUELab – Hagley Gap Project **August 2012 – December 2012**
- Led team of four students in designing and prototyping a water filtration system to be implemented in Hagley Gap, Jamaica.

SKILLS

Proficiency in:
- Autodesk Inventor, SolidWorks, Adobe Illustrator, Adobe Photoshop, and Microsoft Office
- Lathe operation, mill operation, basic machine shop training
- Technical writing, and schedule and budget planning

Languages:
- English, Tagalog (language of the Philippines)