

# EDWARD CHEUNG

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<b>EDUCATION</b>	<b>UNIVERSITY OF MICHIGAN</b> <b>College of Engineering</b> Master of Science in Structural Engineering, April 2014 <ul style="list-style-type: none"><li>• GPA: 3.6/4.0</li><li>• Tauber Institute for Global Operations Fellow</li></ul> Bachelor of Science in Civil and Environmental Engineering, April 2013 <ul style="list-style-type: none"><li>• GPA: 3.8/4.0, Summa Cum Laude</li><li>• Concentration in Structural Engineering/Construction Management</li><li>• International Minor in Engineering</li><li>• Admitted to Engineering Global Leadership Honors Program</li></ul>	<b>Ann Arbor, MI</b>
<b>EXPERIENCE</b> <b>2014-Present</b>	<b>SHELL INTERNATIONAL EXPLORATION AND PRODUCTION INC.</b> <b>Offshore Structures Engineer</b> <ul style="list-style-type: none"><li>• Engineer in Secondary Steel Facilities Design Team, responsible for design of topsides structural steel in Gulf of Mexico production platforms.</li><li>• Developed script in Excel VBA to convert equipment data to input for structural analysis, reducing engineering effort and chance for data entry errors</li><li>• Consolidated equipment data from engineering disciplines and disseminated monthly reports to various stakeholders; revamped existing spreadsheet by presenting data targeted towards end-users</li><li>• Developed matrix structural analysis tool in Excel VBA to allow mass scripting of repeated pipe support analyses; determined edge cases of pipe support sizing, leading to reductions in platform weight and cost</li><li>• Led effort on advanced structural analyses, including dynamic analyses on high-speed rotating equipment and finite-element analysis of crimp plate performance to ensure platform reliability and safety.</li></ul>	<b>New Orleans, LA</b>
<b>Summer 2013</b>	<b>FORD MOTOR COMPANY GLOBAL PAINT OPERATIONS</b> <b>Tauber Institute Summer Intern</b> <ul style="list-style-type: none"><li>• Analyzed existing operation of Dearborn Truck Plant (DTP) for hem flange paint defect occurrence rate and possible mitigation options</li><li>• Assessed technical and process feasibility of implementing new cleaning technology in existing pretreatment and e-coat paint booths; conducted extensive research showing 50-90% hem flange defect reduction with ultrasonic cleaning system</li><li>• Constructed business case with projected annual savings at DTP of up to \$1.6M and positive ROI within one year due to reduced warranty and rework costs; additional savings possible with implementation in Ford's other paint facilities worldwide</li></ul>	<b>Dearborn, MI</b>
<b>2011-2014</b>	<b>UNIVERSITY OF MICHIGAN STEEL BRIDGE TEAM</b> <b>Co-Captain</b> <ul style="list-style-type: none"><li>• Led design and fabrication of 1/10th scale model bridge to compete in National Conference; bridge judged on build time, deflection, weight efficiency, aesthetics</li><li>• Managed extensive load testing program to highlight and troubleshoot local and global structural deficiencies; developed remedial strategies to meet strict fabrication deadlines</li><li>• Developed linear program implementing simplex algorithm to optimize for fastest build order given limited worker, resource, and spacial constraints</li><li>• Managed schedule among team members to ensure timely completion of design and fabrication milestones while mentoring new members to develop skills necessary to contribute to team success</li></ul>	<b>Ann Arbor, MI</b>
<b>ADDITIONAL</b>	<ul style="list-style-type: none"><li>• Mentor of Asian-Pacific American 101 (APA 101), student-led organization discussing current social issues pertaining to Asian Americans</li><li>• Proficient user of SolidWorks, AutoCAD, Abaqus, RISA3D, Matlab, C++, Microsoft Office</li><li>• Working knowledge in Cantonese, proficient in Japanese</li></ul>	