EDWARD CHEUNG

2727 Eastlake Ave E, Unit 208 • Seattle, WA 98102 edcheung@umich.edu • (248) 622-0610

EXPERIENCE 2015-Present

SELF-EMPLOYED

Seattle, WA

Full-Stack Developer (http://edcheung.io)

- Fluent in modern web technologies including HTML5, CSS3, Javascript, JQuery, Bootstrap, React.js with Flux/Redux, D3.js, Node.js, MongoDB, Heroku deployment. Experience creating Single-Page Applications using React with Flux/Redux. Personal portfolio can be found at http://edcheung.io
- Certified MongoDB Developer Associate. Completed 7-week M101JS: MongoDB for Node.js Developers course; learned NoSQL database structure and implemented back-end of MongoMart app as final project
- Acquired FreeCodeCamp Front-End Development certification; created responsive
 Javascript/Bootstrap web apps while practicing AJAX queries of web APIs and advanced
 algorithms. Completed React.js, Node.js, and MongoDB portions of curriculum, in progress
 through D3.js and Full-Stack projects
- Completed 12-week course, Object-Oriented Programming with Java, offered by University of Helsinki, with emphasis in key OOD and OOP principles
- Completed freelance front-end project with Couchster.com, converting existing LAMP-stack site to tablet/mobile responsive using Bootstrap

2014-2016

SHELL INTERNATIONAL EXPLORATION AND PRODUCTION

New Orleans, LA

- **Offshore Structures Engineer**
- Structural Engineer in Secondary Steel Facilities Design Team, responsible for design of topsides structural steel in Gulf of Mexico production platforms
- Developed script in Excel VBA to convert equipment data to input for structural analysis, reducing engineering effort and chance for data entry errors
- Consolidated equipment data from engineering disciplines and disseminated monthly reports to various stakeholders; revamped existing spreadsheet by presenting data targeted towards end-users
- Developed matrix structural analysis tool in Excel VBA to allow mass scripting of repeated pipe support analyses; determined min and max dimensions of pipe support sizing, leading to reductions in platform weight and cost
- 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

2011-2014

UNIVERSITY OF MICHIGAN STEEL BRIDGE TEAM Co-Captain

Ann Arbor, MI

- Led design and fabrication of 1/10th scale model bridge to compete in National Conference; bridge judged on build time, deflection, weight efficiency, aesthetics
- Managed extensive load testing program to highlight and troubleshoot local and global structural deficiencies; developed remedial strategies to meet strict fabrication deadlines
- Developed linear program implementing simplex algorithm to optimize for fastest build order given limited worker, resource, and spacial constraints
- 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

EDUCATION

UNIVERSITY OF MICHIGAN

Ann Arbor, MI

College of Engineering

Master of Science in Structural Engineering, April 2014

- Tauber Institute for Global Operations Fellow
- GPA: 3.6/4.0

UNIVERSITY OF MICHIGAN

Ann Arbor, MI

Bachelor of Science in Civil and Environmental Engineering, April 2013

- GPA: 3.8/4.0, Summa Cum Laude
- Concentration in Structural Engineering/Construction Management
- International Minor in Engineering
- Admitted to Engineering Global Leadership Honors Program