EDWARD CHEUNG

2609 Laurel St • New Orleans, LA 70130 echeung1991@gmail.com

EXPERIENCE 2015-Present

SELF-EMPLOYED Full-Stack Developer

New Orleans, LA

- Self-taught and experienced in modern web technologies including HTML5, CSS3, JQuery, Bootstrap, React.js, D3.js, Node.js, MongoDB, Heroku deployment
- 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 web apps while practicing use of web APIs and advanced algorithms
- Completed 12-week Object-Oriented Programming with Java course offered by University of Helsinki, with emphasis in key OOP principles (encapsulation, abstraction, polymorphism, inheritance)

2014-Present

SHELL INTERNATIONAL EXPLORATION AND PRODUCTION INC.

Offshore Structures Engineer New Orleans, LA

- 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 edge cases 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

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

ADDITIONAL

- Mentor of Asian-Pacific American 101 (APA 101), student-led organization discussing current social issues pertaining to Asian Americans
- Working knowledge in Cantonese, proficient in Japanese