

NICHOLAS MONTES

32460 Huber Lane, Fraser, MI 48026 | 248-935-9206 | njmontes@umich.edu | www.linkedin.com/in/njmontes

EDUCATION

- Stanford University, Stanford, CA** Mar. 2016
Master of Science in Mechanical Engineering with focus on Energy Systems
Cumulative GPA: 3.93/4.00
Relevant Coursework: Battery Principles & Materials, Combustion, Energy Systems Modeling, Probability & Statistics
- University of Michigan, Ann Arbor, MI** Apr. 2014
Bachelor of Science in Mechanical Engineering with International Engineering Minor
Cumulative GPA: 3.88/4.00
Relevant Coursework: Advanced Energy Solutions, Energy Technology & Policy, Macroeconomics, Probability & Statistics, Thermodynamics (3 courses)

EXPERIENCE

- NanoEnergy Lab at Stanford University** Sept. 2014 - Present
Research Assistant, Lead Teaching Assistant
- Managed a group of undergraduate students in developing a decision making tool that compares diesel, CNG, and electric powered buses in terms of lifetime costs, energy usage, and emissions
 - Directed three other teaching assistants in planning all course logistics, held weekly tutorial sessions to educate students on difficult concepts and occasionally delivered lecture to an audience of > 80 people
 - Conducted a feasibility study of utilizing micro-gas turbines in ground vehicles and presented the findings to R&D program managers within the federal government
- Department of Energy Industrial Assessment Center** Jan. 2013 - Aug. 2014
Energy Analyst, Research Assistant
- Executed six on-site energy audits at industrial facilities, collected energy usage data and identified energy efficiency opportunities for boilers, compressed air systems, furnaces, HVAC, lighting, and water usage
 - Composed reports providing clients with estimates on expenditures, savings and ROIs for each energy saving recommendation
 - Followed up with clients after a six month period to determine which recommendations had been implemented and seek feedback if a recommendation was not implemented
- Ford Motor Company** May - Aug. 2013
Vehicle Body Engineering Intern
- Provided project oversight for the testing of a tailgate latching system for the 2015 Ford F-150 pickup truck
 - Reviewed technical protocol documentation to ensure all testing was being conducted appropriately all requirements met
 - Provided recommendations to management on design changes for the tailgate system to resolve failure identified during testing
 - Drafted a robust vibration testing procedure resulting in early identification of door latches with loose components thereby reducing likelihood of product recall
- General Electric** May - Aug. 2012
Manufacturing Engineering Intern
- Decisively outlined and implemented a process to detect and reduce manufacturing labor cost variance resulting in an estimated cost savings of \$390,000 per year
 - Led cleanup of manufacturing tooling inventory by eliminating over 1,600 redundant tools and developed a more controlled process for purchasing tools that promotes a leaner inventory

EXTRA CURRICULAR

- American Society of Mechanical Engineers** Dec. 2011 - Apr. 2014
President, External Vice President, Events Officer
- Better Living Using Engineering Laboratory (BLUElab) – Woven Wind** Sept. 2012 - Sept. 2013
Wind Turbine Blade Design Team

TECHNICAL SKILLS

- Software: Access, Adams, AutoCAD, Catia V5, Cantera, Excel, Minitab, PowerPoint, Simulink, SolidWorks, STANJAN, Word
- Programming: C++, MATLAB