

## EDUCATION

<b>Northeastern University</b> Boston, MA Sep 2013 – May 2018	<i>Candidate for B.S. in Mechanical Engineering, Minor in Computer Science</i> <b>AFFILIATIONS:</b> Tau Beta Pi, Pi Tau Sigma, University Scholar's Program, NSBE, Black Engineering Student Society (Technical Outreach Chair, 2014-2015) <b>COURSES:</b> Machine Design, Heat Transfer, Fluid Mechanics, Control Systems, FEA Mechanics of Materials, Dynamics and Vibrations, Material Science, Capstone	<b>GPA: 3.89</b>
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## EXPERIENCE

<b>Instron</b> <i>Mechanical Design Co-op</i> Norwood, MA July 2016 - Dec 2016	<i>I designed, analyzed, and assembled unique solutions to meet customer requirements in a fast-paced environment. Projects ranged from simple adapters to complex fixtures.</i> <ul style="list-style-type: none"><li>Acted as project manager for 38 delivered custom products, while assisting in others</li><li>Quoted, designed, sourced material and selected finishes for components and projects</li><li>Utilized 3d printer to prototype and validate proof of concept designs</li><li>Created detailed models of systems and components using SolidWorks and EPDM</li><li>Created assembly drawings and installation instructions for manufacturing and customers</li><li>Performed risk analysis of components using SolidWorks FEA tool and physical testing</li></ul>
<b>GE Aviation</b> <i>Infra-Engineering Co-op</i> Bohemia, NY July 2015 - Dec 2015	<i>As the process owner for the site's chemical management, I worked closely with an interdisciplinary internal team as well as several vendors to ensure continued availability.</i> <ul style="list-style-type: none"><li>Coordinated with 15 suppliers while ensuring compliance and timeliness</li><li>Developed and implemented a new chemical management process for the entire site</li><li>Reduced critical chemical shortages by more than 80%</li><li>Designed test methods and a fixture to stake PCB's with high repeatability</li><li>Drafted detailed wire harnesses in AutoCAD to be made by outside vendors</li></ul>
<b>Whitford Research Group</b> <i>Undergraduate Researcher</i> Boston, MA June 2014 – Aug 2014	<i>I developed 4 computational models for protein folding simulations in addition to running, and analyzing data from over 20 biomolecule systems in search of a more accurate model.</i> <ul style="list-style-type: none"><li>Developed shell and Perl scripts to control simulations and analyze data</li><li>Brought folding behavior 40% closer to mimicking the natural phenomena</li><li>Validated accuracy of simplified protein model in depicting large-scale dynamics</li><li><b>Publication:</b> Jackson, J.; Nguyen, K.; Whitford, P.C. Exploring the Balance between Folding and Functional Dynamics in Proteins and RNA. <i>Int. J. Mol. Sci.</i> 2015, 16, 6868-6889</li></ul>

## SKILLS & INTERESTS

<b>Software</b>	• SolidWorks (CSWA), EPDM, GitHub Client, MATLAB, AutoCAD, ANSYS, LabVIEW
<b>Languages / Frameworks</b>	• JavaScript (jQuery), Python, HTML, CSS
<b>Manufacturing</b>	• 3D Printing (SLA/FDM), Hand Tools, Electromechanical Assembly, Soldering (novice)
<b>Interests</b>	• Web Development, Modeling and 3D Printing Props, Hackathons, Weightlifting, French Language, Reading

## AWARDS & HONORS

<b>University Scholar</b>	• Earned full-tuition scholarship awarded to top 1% of Northeastern's students on basis of academic achievement, leadership and service
<b>Hack UMass Finalist (2016)</b>	• Ranked within the top 8 of 92 teams for our hackathon project, "Emoji Home"