
EDUCATION

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| Northeastern University Boston, MA Sep 2013 – May 2018 | <ul style="list-style-type: none">• B.S. Mechanical Engineering, Minor in Computer Science GPA: 3.89• Affiliations: Tau Beta Pi, Pi Tau Sigma, University Scholar's Program, NSBE, Black Engineering Student Society (Technical Outreach Chair), ASME• Courses: Machine Design, Thermodynamics, Fluid Mechanics, Control Systems, Mechanics of Materials, Dynamics and Vibrations, Material Science, Finite Element Analysis, Measurements and Analysis, Circuits, Intro to C++/MATLAB |
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EXPERIENCE

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| Instron <i>Mechanical Engineering Co-op</i> Norwood, MA July 2016-Present | <ul style="list-style-type: none">• Design custom electromechanical systems for unique customer applications• Lead the development of a variable size, snap-fit, LVDT mounting fixture• Rapidly design, fabricate, and assemble plastic and metal fixtures• Design with consideration for manufacturability, assembly, and GD&T• Manage 15+ concurrent projects throughout development lifecycle• Perform risk analysis of accessories using SolidWorks FEA tool and physical testing |
| GE Aviation <i>Infra-Engineering Co-op</i> Bohemia, NY July 2015-Dec 2015 | <ul style="list-style-type: none">• Reduced critical chemical shortages by more than 80% by developing and implementing a new chemical management process• Designed test methods and fixtures to stake PCB's with high repeatability• Drafted detailed wire harnesses in AutoCAD to be made by outside vendors• Coordinated with 15 suppliers while ensuring compliance and timeliness• Participated in Lean Action Workouts and other process improvement events |
| NSBE - Northeastern <i>Technical Outreach Chair</i> Boston, MA May 2014 – May 2015 | <ul style="list-style-type: none">• Developed an engaging game design and programming curriculum for students• Taught weekly classes on game design using Stencyl to K-12 students• Taught weekly classes on MS Office for adults reentering the work force• Planned a community outreach event with a local school, and trained volunteers• Coordinated efforts between student groups and professional organizations wishing to serve the community |
| Whitford Research Group <i>Undergraduate Researcher</i> Boston, MA June 2014 – Aug 2015 | <ul style="list-style-type: none">• Developed 4 computational models for protein folding simulations• Brought folding behavior 40% closer to mimicking the natural phenomena• Validated accuracy of simplified protein model in depicting large-scale dynamics• Ran and analyzed simulations for over 20 biomolecule systems• Developed shell and Perl scripts to control simulations and analyze data• Publication: 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. |

SKILLS & INTERESTS

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| Software | <ul style="list-style-type: none">• Solid Edge, Solidworks, AutoCAD, ANSYS, LabVIEW, Android Studio |
| Programming Languages | <ul style="list-style-type: none">• Python, HTML, CSS, Javascript, MATLAB |
| Manufacturing | <ul style="list-style-type: none">• GD&T, Design for Low/High Volume Manufacturing, 3D Printing (SLA/FDM), Hand Tools, Soldering, Electromechanical Assembly |
| Interests | <ul style="list-style-type: none">• French (Intermediate), Weightlifting, Reading, Programming, 3D Printing |