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Jovaun Jackson

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github.com/XIIFulminata

EDUCATION

Northeastern University Boston, MA May 2018	*Candidate for B.S. in Mechanical Engineering, Minor in Computer Science*	**GPA:** 3.89

AFFILIATIONS: Tau Beta Pi, Pi Tau Sigma, University Scholar's Program, NSBE

COURSES: Machine Design, Heat Transfer, Capstone, Fundamentals of Computer Science I, Intro to Matlab and C++, Circuits, System Analysis and Controls

EXPERIENCE

Instron
Mechanical Design Co-op
Norwood, MA
July 2016 - Dec 2016

Designed, analyzed, and assembled unique solutions to meet customer requirements in a fast-paced environment. Delivered 38 projects including test fixtures, schematics, and debris shields.

- Designed a quick release clamp for multiple specimen sizes eliminating the need to switch fixtures between samples, and minimizing test setup time
- Quoted, modeled, sourced material and selected finishes for new projects
- Utilized 3D printer (SLA) to prototype and validate proof of concept designs
- Created detailed models of systems and components using SolidWorks and EPDM
- Created assembly drawings and installation instructions for manufacturing and customers
- Assembled complex electromechanical fixtures, and performed risk analysis of components using SolidWorks FEA tool and physical testing

GE Aviation
Infra-Engineering Co-op
Bohemia, NY
July 2015 - Dec 2015

Worked closely with an interdisciplinary internal team as well as several vendors to ensure continued availability of required chemicals leading to an 80% reduction in critical shortages.

- Coordinated with 15 vendors to ensure timeliness and adherence to site quality standards
- Used existing usage data to establish a strategic ordering pattern for each of the site's 100+ chemicals, reducing critical shortages by more than 80%
- Designed test methods and a fixture to stake circuit boards with high repeatability
- Reduced safety label creation time by 90%, automating in MS Access

Whitford Research Group
Undergraduate Researcher
Boston, MA
June 2014 – Aug 2014

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.

- Developed shell and Perl scripts to control simulations and analyze data
- Created data visualizations using gnuplot and Matlab
- Developed a model that brought folding behavior 40% closer to the natural phenomena
- Validated accuracy of simplified protein model in depicting large-scale dynamics
- **Publication**: Jackson, J.; Nguyen, K.; Whitford, P.C. Exploring the Balance between Folding and Functional Dynamics in Proteins and RNA. *Int. J. Mol. Sci.* 2015, *16*, 6868-6889

SKILLS & INTERESTS

Languages / Frameworks	Python, JavaScript, jQuery, HTML, CSS
Software	SolidWorks (CSWA) + EPDM (Data Management), Git, Matlab, AutoCAD, Ansys, LabVIEW
Manufacturing	3D Printing (SLA/FDM), Hand Tools, Milling Machine, EM Assembly, Soldering (novice)
Interests	Web Development, Modeling and 3D Printing Props, Hackathons, Weightlifting, French

PERSONAL PROJECTS

Wizard's Chess *jovaunjackson.me/wiz*	A chess board that moves magnetic pieces using a system of belts, pulleys, and servomotors *Tools Used: Hand Tools, 3D Printing (FDM), Arduino*
Personal Website *jovaunjackson.me*	Responsive website displaying mechanical projects, software projects, and work experience *Tools Used: JavaScript, HTML/CSS, Foundation, Git*