

Theodore Ward

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EDUCATION

Northwestern University

Major: Bachelor of Science in Mechanical Engineering

Relevant Coursework: Design Engineering, Product Design, Design for Manufacturing

Evanston, IL

Graduated: June 2018

Education Continued

Northwestern Full Stack Bootcamp

January 2022 – July 2022

- Designed and built multiple apps on both the front and back end
 - Web app that to search local fish species when planning fishing trips.
 - Application to search for recipes, add ingredients to server-side tables for a shopping list and pantry lists. Supports user authentication and separates lists by user.
- Extensive experience working in JavaScript, and JavaScript based languages.
 - JavaScript, Express.js, Node.js, React.js

RELEVANT EXPERIENCE

UL LLC

May 2019 - Present

Project Manager

- Lead Short Term Process Improvement Initiatives
 - Lean/Six Sigma Yellow Belt Certified.
 - Automation of existing workflows.
- Manage Mid (\$15,000) to Large (\$30,000+) projects from scope to completion.
 - Lead Project team consisting of Field Engineers, Test Technicians, and other Project Mangers

Associate Project Manager

- Manages low (\$5,000) to mid (\$15,000) projects from scope to completion.
 - Establishes project timelines and requirements.
 - Manages inspections of client facilities and selection of samples for testing on a timely basis.
 - Leads Field Engineers and Testing Technicians through project timelines
- Reviews project requests for testing and revisions.
 - Create and manage test plans, schedule work, and manage team members

Observational Astronomy Research Group

January 2018 – October 2018

Mechanical Design Engineer

- Designed an optics-based measurement system for NASA funded research group measuring nanometer angle changes in a surface profile resulting from induced magnetic fields.
 - Modeled the sample mount and analyzed for center of mass and bending using Siemens NX to minimize off axis bends and maximize measurement precision.
- Controlled the measurement system via a custom Python script to scan the sample surface.
 - Developed a program to scan a 25mm by 25mm square of the sample and convert intensity measurements into a 2D gaussian profile to demonstrate controlled changes over extended periods of time.

NXR Lab at Northwestern University

June 2017 – October 2017

Mechanical Design Engineer

- Designed a new device for taking surface texture data (tribometry and vibrometry) at the same time
 - Designed and modeled using 3D CAD (Onshape) for 10 micrometer tolerances on a manual mill
 - Wrote Mathematica code to ensure proper resonance and MATLAB code for data acquisition process
- Designed to incorporate Electrostatic Haptic Displays for increased range of data acquisition
- Designed and modeled a fully adjustable method to secure the arm and finger in position during data acquisition
 - Comprehensive research of existing methods and patent space

ADDITIONAL INFORMATION

Skills: Siemens NX, SolidWorks, JavaScript, SQL, Express.js, Node.js

Software Proficient: JavaScript, mySQL, Python

Interests: Endurance Sports (Marathon, IRONMAN, Triathlon, Cycling), Ukulele, Painting