

# Robert Dieter II

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## EDUCATION

### Northwestern University

*Master of Science, Structural Engineering*

*Bachelor of Science, Mechanical Engineering*

Evanston, IL

June 2025

June 2025

### London School of Economics and Political Science

*Summer Program, Data Engineering*

London, UK

July 2023

## TECHNICAL SKILLS

**Coding:** Python, MATLAB, R/RStudio, CircuitPython

**Software:** SolidWorks, Fusion 360, Siemens NX CAD & CAM, Microsoft Office 365, Abaqus

**Prototyping and Manufacturing:** 3D printing (FDM, SLA, SLS), laser cutting, injection molding, CNC machining, microcontrollers & embedded circuitry, common shop tools

## WORK EXPERIENCE

### RWG Engineering

*Summer Engineering Intern*

Wheaton, IL

June 2024 – August 2024

- Created plan & profile (P&P) sheets in AutoCAD to effectively communicate construction designs and specifications with the team and client
- Enabled several renewal projects at commercial sites by reviewing and applying updated codes and constraints to ensure compliance
- Used AutoCAD to digitize paper plans and annotations to establish consistency across the team and create digital records for later reference

### Wheaton Academy

*Maker Camp Leader*

West Chicago, IL

Summers 2021-2023

- Led hands-on activities for 24 middle school students in mechanical engineering disciplines, such as guiding them through construction of their own FDM 3D printers for use throughout the camp
- Mentored students in the use of CAD software to create their own models, introducing technical design skills
- Organized several design competitions to reinforce the design process in an exciting and engaging manner
- Created a 3D printing guide by compiling useful beginner resources to support the students' continued success using their 3D printers after the camp concluded

## PROJECTS

### Simulated Carwash Training System | *National Carwash Solutions*

September 2024 – March 2025

- Designed and constructed a training board to teach electrical troubleshooting in a safe, controlled environment while also reinforcing best safety practices
- Utilized SolidWorks to model and shop tools/3D printers to produce a miniature carwash, preparing trainees for problems they are likely to encounter in the field
- Integrated electrical components (relays, PLCs, etc.) and accompanying errors to enhance the learning experience
- Maintained accurate documentation of 50+ weekly team/client meetings to ensure timeliness

### The Cosmic Cone Project | *Computer Integrated Manufacturing*

January 2025 – March 2025

- Created a two-part assembly to maximize the capabilities of CNC machining and injection molding technologies
- Leveraged NX CAD to model the parts and NX CAM to program the machining operations
- Successfully injection molded 50+ assemblies using molds created on a 3-axis CNC machine
- Employed metrology concepts to analyze and evaluate production data against specified GD&T and assembly fits

## LEADERSHIP & VOLUNTEERING

### Reformed University Fellowship

*President*

Evanston, IL

July 2023 – August 2024