COLE T. GOODWIN

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EDUCATION

University of Illinois at Urbana-Champaign – Grainger College of Engineering

May 2025 (Expected)

Bachelor of Science in Mechanical Engineering

GPA: 3.8/4.0

Barrington High School - Barrington, Illinois

GPA: 4.5/4.0

August 2017 - May 2021

RELEVANT WORK EXPERIENCE

Canadian Pacific Kansas City Railway – Bensenville, Illinois

May 2024 - Present

Engineering Intern

- Overhauled previous naming conventions, creating a unified and efficient system across the network
- Led team to update characteristics of assets in regulatory system, in preparation for the final internal structures merger
- Verified outsourced asset data accuracy to align with internal GIS systems
- Shadowed yard Project Manager on site during yard track projects and mainline siding installations

TTX Company – Chicago, Illinois

March 2023 - March 2024

Fleet Management Intern

- Coordinated with railroads and shippers to provide tailored customer service solutions
- Managed the General Equipment Fleet railcar pool and maintained accounting records for TTX-owned railcars
- Prepared industry reports and analytics for company executives and shareholders
- Developed and delivered high-level presentations to outline critical business operations

Metrom Rail – Crystal Lake, Illinois

June 2019 – August 2019

Intern

- Brainstormed with the engineering team to identify and evaluate potential solutions to rail safety hazards
- Conducted prototype testing for rail safety equipment ahead of an industry conference
- Analyzed test data using Microsoft Excel, employing linear regression to draw insights

PROJECT HIGHLIGHTS

Impact Resistant Material for Helmets – Champaign, Illinois

August 2024 - Current

Team Member

- Conducted literature reviews on impact-resistant materials and modern helmet design practices
- Established design criteria and evaluated prototypes for material and design performance
- Produced and tested top-performing designs in a laboratory setting, reporting detailed findings

Transmission Design and Fabrication Project – Champaign, Illinois

Team Member

January 2024 – May 2024

- Collaborated with a 4-person team to design and prototype a simple transmission system
- Modeled, assembled, and performed finite element analysis on forward, reverse, and braking mechanisms using Fusion 360
- Delivered a comprehensive presentation and technical report summarizing project outcomes

Accessibility Fruit Slicer Design – Champaign, Illinois

August 2023 – December 2023

Team Member

- Partnered with a 3-person team to design and prototype a fruit slicer tailored for individuals with mobility impairments
- Utilized Fusion 360 and Ultimaker Cura for 3D modeling and printing of the prototype
- Applied MATLAB for Position Velocity Analysis and Design Force Analysis to optimize linkage performance

RELEVANT COURSE WORK

Engineering Materials Statistics and Probability Fundamentals of Fluid Dynamics Mechanical Design II Dynamics of Mechanical Systems Thermodynamics

HONORS, SKILLS, AND PROFICIENCIES

<u>Honors</u>	<u>Skills</u>		<u>Proficienci</u>	<u>Proficiencies</u>	
- 5-Time Dean's List Recipient	- Python	- MATLAB	- Microsoft Excel	- Microsoft Word	
- National Honor Society Member	- Fusion 360	- Ultimaker Cura	 Microsoft PowerPoint 	- Microsoft Outlook	
- Illinois State Scholar	- SAP	- Concur	- Google Earth		