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 *August 2017 – May 2021*
GPA: 4.5/4.0

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

Honors	Skills		Proficiencies	
- 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	-Ansys Mechanical	- SolidWorks	- Google Earth	