

Cole Rabe

Winchester, MA · (617) 756-9014 · colerabe@gmail.com · www.linkedin.com/in/cole-rabe

EDUCATION	Worcester Polytechnic Institute (WPI) , Worcester, MA Bachelor of Science in Mechanical Engineering, GPA 3.77/4 Minor in Electrical & Computer Engineering with RF engineering concentration Relevant Courses: Manufacturing Science, Prototyping and Computer-Controlled Machining, Stress Analysis, Computer Aided Design, Materials Science, Static Systems, Dynamic Systems, Thermodynamics, Fluid Mechanics, Heat Transfer, RF Circuit Design, Continuous-Time Signal and System Analysis, Microelectronic Circuits I, Microelectronic Circuits II, Thermofluid Application and Design	May '24
AWARDS	Best Project in Modeling And Analysis Of Mechatronic Systems , WPI	March '23
CERTIFICATIONS	Associate - Mechanical Design , Dassault Systèmes Aerial Lift Operator , OSHA	Sept '21 April '21 - Sept '25
PROJECTS	Major Qualifying Project: Avoiding Ice Deformation in Fixed Docks , WPI <ul style="list-style-type: none">Led the modeling and simulation of alternative systems in Creo Parametric to mitigate ice deformation forcesConstructed testing setups, collected real-world test data, and validated results using MATLABPresented findings to industry judges, demonstrating alignment between simulated and real-world data Interactive Qualifying Project: Reducing Traffic Congestion , Nantucket <ul style="list-style-type: none">Collaborated with team members to identify and develop solutions for traffic congestionEngaged with residents and business owners to gather insights and developed digital tools for data collectionAnalyzed parking and congestion data, identified problem areas, and proposed feasible solutionsDelivered comprehensive findings through a report and a televised presentation to town officials and citizens	Jan '23 – Aug '23 Oct '22 – Dec '22
SKILLS	Software: SOLIDWORKS Audacity Creo Parametric Microsoft Word, Excel, PowerPoint Visual Studio Arduino IDE Altium Designer MATLAB Languages: Python C/C++ HTML CSS Training: Lab safety Wood and metal shop training	
EXPERIENCE	Technical Manager , WPI, Worcester, MA <ul style="list-style-type: none">Led the management of theatre systems, infrastructure, and tools ensuring optimal performanceDirected and mentored users of the space, providing guidance and support to enhance their experienceImplemented and enforced safety protocols, serving as a liaison between staff and students to ensure a secure and collaborative environment Repair Technician/Installer , The Computer Cafe, Arlington, MA <ul style="list-style-type: none">Worked with businesses to install networking solutions into their spacesSpoke with customers to troubleshoot and repair laptops and desktops Scenic Carpenter , The Hanover Theatre & Conservatory, Worcester, MA <ul style="list-style-type: none">Collaborated with a small team to construct the set for the Conservatory's summer '23 performance of <i>Fiddler on the Roof</i> Team Member , Boda Borg Boston, Malden, MA <ul style="list-style-type: none">Interacted with guests to handle waivers, payment, and reservationsWorked with guests to figure out the solution to rooms and develop foundational problem solving conceptsResolved issues with the quests that were reported by the guests STEAM Instructor , Zaniac STEM Center, Woburn, MA <ul style="list-style-type: none">Taught K-8 STEAM concepts such as programming, robotics, circuits, and 3D printingEngaged with parents to ensure their child is understanding the class conceptsDeveloped and adapted course material to reinforce foundational concepts	Feb '21 – May '24 July '17 – May '24 June '23 Sept '19 – Feb '20 Feb '17 – Mar '18
PATENTS	Rabe, Cole. 2023. Water Dock Ice Tolerance 63/460,831, filed 4/21/2023. Patent pending.	