## **Center for Industrial Mathematics and Statistics**

Department of Mathematical Sciences, Worcester Polytechnic Institute

**Mission:** CIMS aims to build partnerships between WPI, industry, and the general mathematical community that benefit our students, our faculty, and our sponsors.

## **Projects:**

- Performing Binary Classification ofContest ProfitabilityExtension of theHuman Blood Coagulation Model to Understand the Role of
- C1 inhibitor in Hereditary Angioedema Multiscale Modeling in Beamed Energy Harnessing Applications
- Computer-Aided Design of Cermaic Millimeter-Wave Absorbers in Power Beaming Applications
- Robust Dimension
  Reduction
- Robust Algorithsm for Adaptive Resource Management Enabling Deception Extreme DDOS Defense

"Not only did the students meet the high expectations required by the complexity of the project, they showed genuine insight and at times, even stumped the experts."

-Corporate Partner



CIMS focuses on how the intersection of mathematics and industry benefits both. We do this in a range of activities: from collaborative projects between industry, WPI students and faculty to workshops on how industrial problems can motivate students to learn mathematics. Companies gain insight from a fresh set of eyes on a particular problem of interest, students learn how mathematics can impact the world around them, and educators benefit in how mathematics can be used in new contexts.

For More Information visit: labs.wpi.edu/cims/ or contact Professor Tilley or Professor Sturm

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## Areas:

- Actuarial Mathematics
- Industrial Microwave Modeling Group
- Statistical Consulting Laboratory
- Financial Mathematics Initiatives:
- Preparation for Industrial Careers in Mathematical Sciences
- Research Experiences for Undergraduates in Industrial Mathematics and Statistics
- WPI Fintech Collaborative
- Industrial Mathematics Projects for High School Students
- Mathematical Problems in Industry Workshop

"They bring a level of passion to the project that is not often seen in industry, and a 'can do' attitude to every study that is always refreshing." -Corporate Partner



