NEED HELP WITH A HARD DATA PROBLEM THAT REQUIRES BOTH
DATA SCIENCE SKILLS AND SPECIALIZED FIELD KNOWLEDGE?

BECOME A CAPSTONE PARTNER

WHAT IS A CAPSTONE PROJECT?

Capstones engage MIDS students in a year-long partnership with a non-academic stakeholder (such as a company, government agency, internal Duke organization or nonprofit) and at least one Duke researcher with expertise relevant to the problem being solved.

ABOUT

The Duke University Master in Interdisciplinary Data Science (MIDS) program is home for creative problem solvers who want to use data strategically to advance society. Our program focuses on critical thinking, teamwork, communication, and collaborative leadership to generate data scientists who can add value to any field.

THE PROCESS.

Capstone projects pair external partners with teams of second year MIDS students to generate data insights and recommendations. You provide a problem directly related to your organization's interests and meet with the student team throughout the year.

TRAINING DATA SCIENTISTS.

MIDS students participate in a Capstone course with classroom time and assignments dedicated to establishing team expectations, creating work plans, providing weekly updates, and performing 360-degree evaluations of team performance.

PARTNER ENGAGEMENT.

Partners are an essential part of the capstone process. The expectation is for partners to meet with their student teams weekly or bi-weekly throughout the project for best results.

FINAL RESULTS.

Deliverables are evaluated by a panel of MIDS core faculty and outside partners. Each Capstone team has a midyear review to receive feedback. Each team must achieve specific outcomes and give a final presentation with a white paper about the outcome's implications.

Do you have previously untested ideas or unanalyzed open-source datasets? We want to provide important proof-of-principle work that may lead to more substantial collaborations in the future. We also welcome proposals that might create tools that facilitate community engagement with data and data-driven questions.

Explore a data problem your organization may not have resources to investigate, and work with (and potentially recruit) our students.
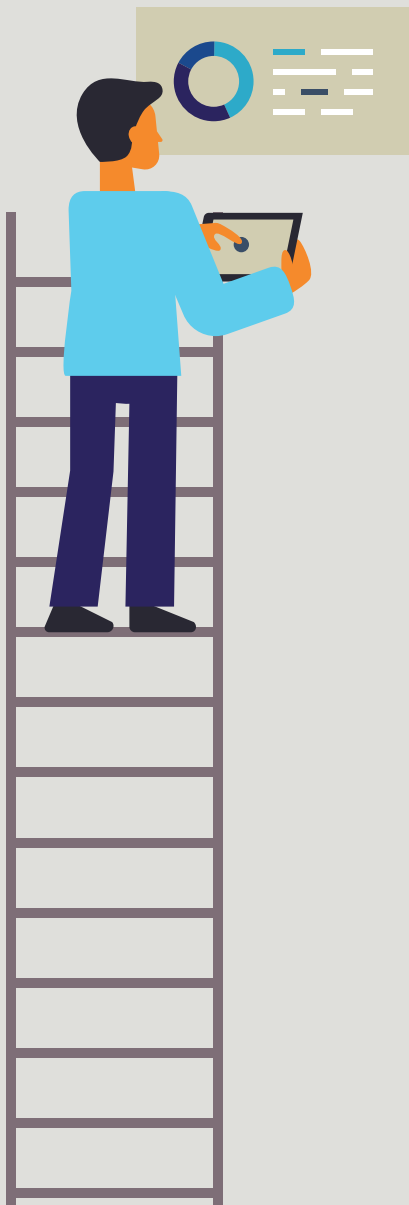
DEADLINE: APRIL 1, 2024

SAMPLE PROJECTS

OPTIMIZED digital marketing campaign to maximize the return on investment of ad purchases. Using data on customer interactions across varying online ad placements, size, and content, the team created an algorithm to help drive customer engagement and maximize revenue.

LEVERAGED the power of machine learning to get insight and make inference for water quality using remote sensing data. Teams built three different machine learning approaches and each model has its strength predicting specific water quality index.

ANALYZED school segregation in Durham and suggested possible remedies including redistricting and evaluating current and future redistricting plans. Students built a framework around generating random district plans and comparing actual plans against those.