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MS BUSINESS ANALYTICS CAPSTONE SPONSORSHIP - CALL FOR PROPOSALS

The Rady MSBA program seeks organizations that are interested in sponsoring a team project for the coming academic year. The sponsor will identify a challenging business problem and provide data for the team to analyze. Below are guidelines for organizations that wish to submit a proposal.

Proposal Introduction: MSBA Capstone Project

Rady's MSBA is a world-class, STEM designated degree program focused on applying modern data science tools to solve real-world problems in business. Blending the core principles of the Rady School of Management with modern analytical tools, our students are consistently tested in communication and decision sciences to enhance their leadership skills while applying rigorously trained concepts in mathematics, machine learning, and statistical techniques. In 2023, our program was ranked the #15 Business Analytics programs in the USA by QS International.

Join our capstone and let our students transform your data into actionable insights. Sponsor a team with specialized training in statistics and data science to help you and your business grow. Rady's Master of Science in Business Analytics (MSBA) prepares students for the challenging task of deriving insights and extracting value from vast quantities of structured and unstructured data. At the core of the MSBA curriculum is the Capstone: a team-based learning experience that gives students the opportunity to conduct real-world analytics projects using data from sponsoring organizations while being guided by our esteemed faculty.

The Capstone project spans an academic quarter of 10-12 weeks, and culminates with an executive-level report and presentation to the sponsor. Students work in teams to understand the business problem, and then explore and analyze the data. The final deliverable serves as a detailed report of the results (including code).

We treat your data like it's our own. Each team will sign confidentiality/non-disclosure agreements and meticulously secure your data behind firewalls. We also have the ability to accommodate special requests like performing work within your organization's computing environment. All the results, code, and reports are delivered back to you and destroyed from any UCSD owned assets.

The capstone is the final MSBA course our students must complete in order to meet the rigorous requirements set forth in our learning objectives as well as our accreditation to receive their degree. It's also a great experience to support the transition into the field with priceless new connections and a glimpse into real world processes. Needless to say, our students are extremely motivated.

In addition, you are rewarded with connections to a highly demanded pipeline of talent that are sought after by the world's most renowned organizations. This is your opportunity to experience what these students learn, leverage cutting edge AI tools and processes, and screen a wide bench of talent that can fill your ranks of data scientists

that have experience in your specific domain.

In the five years of our program, we have completed over 150 sponsored capstone projects, and have 50 active corporate sponsors spanning virtually every industry segment and include some of the world's leading organizations and best known brands. The benefits to sponsoring a Capstone Project include:

- Help with addressing your organization's business problems which require advanced analytical techniques and receive recommendations based on descriptive, predictive and causal data analysis
- Access to high quality analytics talent for recruiting. Smart firms are building talent pipelines, based on the Capstone – Internship – Job process, ensuring fully vetted advanced analytic hires.
- Access to high-caliber faculty advisors from the Rady School of Management.
- Opportunity to develop a deeper relationship with Rady's Business Analytics Center of Excellence.

Basic Requirements

In building a portfolio of proposals from which our students will select, we are looking for projects that fit in a variety of industries and sectors, address a diversity of types of problems, require advanced depth of analysis, and have ensured availability of rich data at the outset of the project.

The proposal consists of three executive summary components with additional detail to support the value proposition:

1. A concise description of the problem to be addressed and the goal of the project
2. The nature and size of the data set to be analyzed
3. The names of the key contacts within the sponsoring organizations.

In addition:

- From the organization's (your) perspective, the project will have well defined business relevance and value that can be measured (for example, increased revenue or lower costs driven by faster lead times, better customer experience, etc.)
- Additional details in the project descriptions help with project selection and increases the chances for having a capstone team work on your project.
- Project proposals are evaluated by an MSBA faculty/ academic team and accepted projects are presented to the students before the quarter begins for matching and assignment.

MSBA students are equipped with a variety of skills and professional experience. Each team will have skills in statistics, machine learning, data cleaning, and visualization. Students also receive instruction in teamwork, project management, and communication skills. Some of our students have industry experience and can bring additional perspectives, insights, and diversity to your organization.

Your company is invited to provide your data, time, and insights to enable student teams to deliver actionable solutions and impactful findings for your business.

Anatomy of the Capstone Project

Our Core MSBA Faculty is looking for projects with 4 components:

1. **Problem, Objectives and Metrics, and Evaluation** phase which assesses the results from the predictive and prescriptive results against the business metrics that were set in the problem phase. For example, how well do all the actions prescribed (which were derived from statistical measures of accuracy like F-scores) lead to an improvement in the desired objective metric (like Web visits and revenue).
2. **Descriptive** phase where the teams explore and understand the data provided, generating diagnostic results
3. **Predictive** phase where a variety of statistical and machine learning models can be applied and tested

4. **Prescriptive** phase where results are linked to one or more specific business decisions, with recommendations for future projects.

All results belong to the sponsoring organization. Many teams have provided deliverables that have become part of a company's service, tool, or solution offering.

Team Assignments

Students are assigned to teams based on their skills, experience, and compatibility, to achieve the necessary balance given the needs of the project. The team leader is appointed by the MSBA Core Faculty. As mentioned each team is supported by a three-person advising team.

Project Selection

Projects are selected based on the proposal's fit with the overall educational goals of the MSBA program. It is helpful, but not required, for organizations to have experience working with universities and specifically with sponsoring student projects. Proposals that include internship opportunities are especially desirable to students. The main criteria used to select projects include:

Educational value

Likelihood of success

Level of challenge and complexity

Clarity of project goals and business decisions the project results will support

Sponsor motivation and commitment to providing internships

Data quality and accessibility sufficient to address and answer research questions

Firms can submit more than one project. We aim to select a variety of projects each year and typically evaluate over 50 proposals. A viable proposal not selected in the current round can be placed in a queue for future assignment, or can be converted to a summer internship opportunity. We continually look for opportunities to work with new sponsors and in new industry segments.

We will strongly encourage you to consider hosting interns for the summer session (July/August). Please contact me directly and specify your interest in hosting interns. You will be connected to Rady's specialist in analytics careers to coordinate the placement of students as interns.

Confidentiality

Confidentiality is a key element of how the projects are conducted. Unlike a master's thesis, which is published, the Capstone does not have a public disclosure requirement. Only members of the team have access to their sponsor's data. Sponsors will only share data in a manner that is consistent with their third-party data transfer governance rules.

Students receive instruction in data privacy and security, and the law with respect to non-disclosure agreements. Because students are not employees of the university, they must individually consent to the sponsor's NDA before being assigned to a project.

Sponsor Commitments

Each sponsor is required to:

- **Sign a non-disclosure agreement (NDA) to be signed by each student in the team**
- **Securely transfer the promised data on the specified timetable**
- **Assign a liaison, who will be the team's primary point of contact to resolve issues as they may arise provide technical and strategic guidance, as needed, to ensure the project remains on the desired course**
- **Host the team for the project kick-off, regular meetings, and/or final presentation**

- **Help the students articulate the work they did for resume writing and to promote on social media without violating the terms of their disclosure agreements**

The sponsor is not expected to provide ongoing project management and oversight—this is done by the Capstone team under the guidance of the academic coordinator and core faculty members. But firms can exercise their own judgment, especially if valuable learning lessons can be transmitted. Most firms have a weekly check in or point person to help manage the flow and progress of the teams.

Note: there is no fee for capstone projects. We are more interested in creating a natural talent pipeline to internships and job opportunities. The capstone project provides a unique avenue to achieve this together.

More Information

For more information about becoming a Capstone project sponsor, please feel welcome to contact Ion Nemteanu, Executive Director. We will be glad to work with you in formulating your proposal.

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