New concentration helps MBAs make sense of big data

May 11, 2015

Big data is one of the business world's biggest buzzwords, offering organizations the promise of revolutionizing the way they generate value for customers and shareholders. Now, a new MBA concentration gives students the skills they need to help companies transform data into actionable knowledge.



Modeling and Analytics instructor Geoff Parker says employers are expressing growing interest in data analytics skills.

The Freeman School’s analytics concentration is designed to prepare students to master the use of large data sets in business, covering everything from obtaining and managing data to using powerful statistical computing applications to draw meaningful business inferences.

“There’s been quite a bit of interest among students, and we’re seeing huge interest in the employer community,” says Geoff Parker, professor of management science and developer of the concentration’s modeling and analytics course. “It’s an exciting area to be in.”

“As the world becomes increasingly computerized and everything turns into data, we need to continuously enhance the skills we teach to help students keep up,” adds Professor of Finance Russ Robins, who teaches econometrics and forecasting. “The analytics concentration gives students a very highly sought after skill set to put in their toolbox.”

Courses required for the concentration include marketing research as well as three new offerings: modeling and analytics, econometrics and forecasting, and advanced spreadsheet modeling. Topics covered include data mining, clustering, visualization, machine learning, serial correlation, forecasting, and basic time-series regression models for both stationary and nonstationary data. Students completing the concentration will also learn R, an open-source platform for statistical computing that enables users to do some remarkable things.

Ashwin Ananth (MD/MBA ’15), a student in the joint MD/MBA program, used skills he developed in the analytics courses to help improve patient outcomes at Tulane’s Head and Neck Cancer Center.

“We’d collected all this data on patients diagnosed with head and neck cancer, but I didn’t know what to do with it,” says Ananth. “Thanks to Professor Parker, we were able to analyze how long it takes patients to get through the treatment process and identify where there were bottlenecks. I wouldn’t have been able to do that without his class.”

Thomas Altman (MBA ’14) used data from Twitter to generate a heat map that tracked user reactions to last year’s NCAA men’s basketball final in real time, a project he credits with helping him to land his current job as business analyst with software company Aptify.

“The skills I learned in Geoff’s class aren’t necessarily in my job description, but they’re definitely in demand and being able to talk about them intelligently is important,” says Altman. “The fact that I’d done the project in Geoff's class and could talk about it helped separate me from other job candidates.”

Those are the kind of testimonials Parker hopes to hear more of in the coming years, especially as more students start to combine their analytical abilities with skills in other disciplines.

“Our competitive advantage is applying analytical tools to solve problems in industries where we’ve already built expertise, such as finance, energy and entrepreneurship,” he says. “We’re going to be working very closely with the companies that hire our students to make sure we’re teaching them the right skills they need to solve the right problems.”