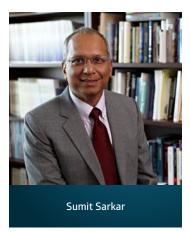
# Research an 'Intense Component' of the Jindal School PhD Experience By Donna Steph Rian

rom helping hotels improve ways to target potential customers, to determining better methods for digital advertisers to promote their business. From studying how corporations use political strategies to influence governments to evaluating how managing intangible assets impact a firm's overall value.

These are a few of the research projects of the Naveen Jindal School of Management's doctoral students.

Complicated, complex and ultimately designed to attract potential employers' interest, graduate research endeavors are an intense component of the



Jindal School's PhD programs, with students striving to continually set themselves apart in today's competitive marketplace.

"Student research has become more progressive and sophisticated during the past few years. We also are getting much more competitive in terms of being published in some of the industry's premier journals," says Dr. Sumit Sarkar, Charles and Nancy Davidson Chair of Information Systems and

director of JSOM's PhD programs.

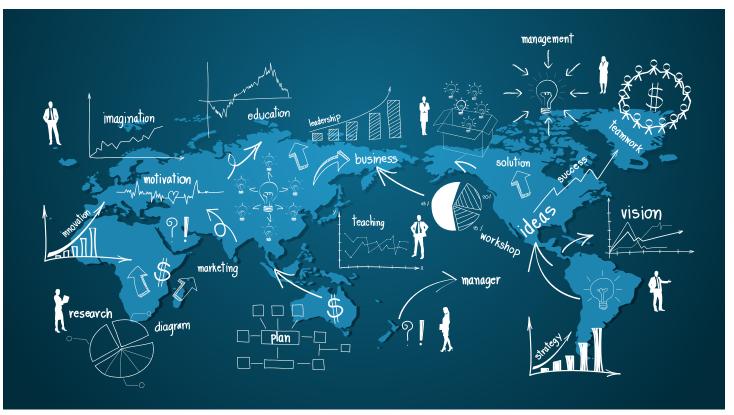
"We have created an environment that has enabled students to compete in this tight marketplace in numerous ways," he adds. "We are offering more PhD level courses than in the past so that students get trained in current and innovative methodologies. We also are providing more flexibility in our curriculum, given the diverse nature of what people are doing nowadays, which enables our faculty to customize our programs to fit student interests."

Following are four graduate students and their research projects:

#### Bharadwaj Kadiyala

Bharadwaj Kadiyala, who studies operations management, spent last summer as a data science intern at Sabre Corp., a technology provider for the global traveler and tourism industry, operating offices in 160 countries.

Kadiyala helped build a model that allows the company to draw insights from customer shopping and booking behavior when they are searching for hotels. In addition, he developed a decision support tool that utilizes this model to determine relative positioning of hotels in search results, based on



customer preferences, and a second product that recommends relevant ads depending on hotel search requests.

"Booking behavior at a hotel can be impacted by factors such as amenities, like free shuttle, breakfast and parking, offered by the hotel; where the hotel is listed on the search results page; location of the hotel in the city, and more," Kadiyala says. "My research answers these questions using advanced econometrics tools. One way hotels can leverage this information is by offering the right promotions to the right customers at the right time, thus improving customers' shopping experience and chances of a booking — which is what I have helped do at Sabre."

> Kadiyala's work for Sabre is one of several research projects he has undertaken. His interests include research in inventory control and management, assortment planning for



e-tailers, pricing mechanisms and more. He has made research presentations at industry/academic conferences around the world and submitted research papers to various academic journals. Kadiyala also is an instructor and teaching assistant at JSOM.

"Advising Bharadwaj has been a pleasure. He is rigorous and proactive," says Dr. Özalp Özer, Ashbel Smith Professor and PhD coordinator for the Operations Management Area. "I work closely with our PhD students to ensure they learn how to contribute knowledge and solutions to relevant and high-impact business problems faced by firms competing in connected global markets. Bharadwaj's recent work is an excellent example. With his research, Bharadwaj also is contributing solution methodologies required to study complex business problems. I expect him to be a highly sought-after faculty candidate upon his graduation."

Originally from India, Kadiyala chose to pursue his PhD at UT Dallas after earning a Bachelor of Technology degree from Dhirubhai Ambani Institute of Information and Communication Technology in India, an MS in applied mathematics from Purdue University and an MS in industrial engineering from Bilkent University in Turkey.

"For my PhD, I wanted to use some of the theoretical concepts I have learned, to solve some real-world business problems," he says. "A PhD in operations management seemed a natural choice. The PhD program at UT Dallas is world-class in OM. We not only have faculty who are experts in a wide range of topics, but also the faculty actively guide PhD students We are among the largest OM programs in the world, in terms of the number of OM PhD students."



#### Zhen Sun

A management science doctoral student specializing in information systems, Zhen Sun is working on a research project involving digital advertising. Her project also combines elements included in her other research interests: data-driven decision making, business intelligence and crowd sourcing.

"Moments after we open a Web page, we see an advertisement," Sun says. "For a Web page to be able to show that advertisement to us, there is a whole ecosystem behind it. This includes advertisers who want to approach online consumers to promote products. It also includes publishers — that is, owners of websites — who want to monetize extra Web page space.

"To efficiently match advertisers with publishers, there also are other parties involved in the ecosystem," she says. "For example, there are ad networks who work as agents of advertisers to help advertisers find online space to place ads. In addition, there are ad exchanges acting as marketplaces to sell ad space provided by publishers through real-time auctions."

Sun's research involves analyzing "the multiple problems inside this ecosystem, because of so many stakeholders involved."

"They all face different problems," she says. "My ultimate goal is to see how this whole ecosystem can work more efficiently and build a better ecosystem that makes every stakeholder happier. Plus, as consumers, we also can feel that we are not being pitted against those advertisers, so that we want to click on ads and look at them. Only when we click on an ad, can it be effective."

Sun received her BE degree in engineering from Tianjin University in China and an MBA from UT Dallas. She is an instructor and teaching assistant at JSOM and expects to earn her PhD next spring. Sun has made research presentations at conferences around the globe and has submitted research papers to numerous academic journals.

"Zhen has developed tremendously as a doctoral student in the last year or so," says Dr. Vijay Mookerjee, Charles and Nancy Davidson Chair and PhD coordinator for the Information Systems Area. "She has shown independence and imagination to formulate problems, and the skill and discipline to produce high-quality papers. She is poised for a great career in academia."

Sun was attracted to the digital advertising field because of its rapid growth and continued expansion potential.

The ecosystem is getting more and more complex, and there are many problems to be solved with new problems continually being generated," Sun says. "Since many parties are involved, it is fascinating to study different problems faced by different parties and how these parties will react to the technology improvement in this area."

## Jinsil (Jean) Kim

Jinsil (Jean) Kim's current research project focuses on corporate political strategies, such as corporate lobbying, in both domestic and international settings. Specifically, she looks at how firms react when they find out that their competitors have been trying to influence the government to write policies that favor them. On the flip side, she also studies how corporations engage in "state capture" — using illicit influence on governments to impact political decisions, laws, regulations and rules.

"I am interested in observing how firms strategize in terms of trying to influence their political environment," Kim says. "Additionally, I also have developed a research stream focusing on how firms compete and the competitive dynamics aspect in specific industries.

"Merging these two broad research streams, my current research project hinges on observing how firms deploy corporate political strategies when faced with politically active industry competitors, especially in the transition economy setting," she says.

Majoring in international management studies, Kim says, "Transition economies include countries such as those in the former Soviet Union that are moving from one type of economy to free-market economies."

Organizations, Strategy and International Management Professor Seung-Hyun Lee, the PhD coordinator for all international management studies



# JSOM RESEARCH VENTURES



he hooding ceremony, now a UT Dallas tradition shining the spotlight on students earning doctoral degrees, began in the summer of 2008. Before then, successful PhD candidates participated in graduate-level graduations but were not otherwise singled out for recognition.

The hooding ceremony dates back to the Middle Ages, a time when many academicians were also religious clerics, and the garb and regalia for both were similar. The gowns, caps and distinctive hoods — which are placed over graduates' heads at the ceremony — remain hallmarks of the tradition and connote scholarly achievement.

The first dean of the Naveen Jindal School of Management, Dr. Ray Lutz, seated front row center in the photo, was the featured speaker at the 2008 ceremony. He recounted the history of UT Dallas and explored what the students could expect in their futures as doctoral graduates.

concentrations, says that "Jinsil is an exemplar doctoral candidate in the OSIM Area. She joined the OSIM PhD program with a political economy background, which gave a strong basis for her study in firm political strategies. Having seen her excel for the past two years, I have no doubt that she will only get better in her research and teaching."

Originally from Korea, Kim grew up overseas. She earned her BA from Cedarville University in Ohio, an MA from Seoul National University in South Korea and an MBA from ESSEC Business School in France.

"I chose to come to UTD because it offered a program that suits me and also because of the prestigious faculty here that I wanted to learn from and work with," Kim says.

Kim has served as a JSOM instructor and presented research papers at conferences around the world.

## Jong-Min Oh

A recent PhD graduate of the Jindal School, Dr. Jong-Min Oh researches corporate finance and empirical asset pricing with primary focus on corporate investments in intangibles, such as innovations and corporate social responsibility.

Oh recently accepted a position at the University of Central Florida, where he serves as an assistant professor of finance. "Unlike valuing tangible assets, such as physical investments like plants, property and equipment, valuing intangible assets is a relatively difficult task due to high uncertainty in their future values. I would like to explore, for example how managing a firm's R&D [research and development] investments impacts that firm's value. So I am interested in how value-relevant information influences the effects of intangible investments on a firm's value."

While at the Jindal School, Oh and 2014 PhD graduate Seong Byun now an assistant professor of finance at the University of Mississippi earned the First Place Doctoral Student Outstanding Paper award at the 2013 annual meeting of the Southern Finance Association. Oh also served as a JSOM instructor.

"In one of my studies, I examine the dual role of a firm's R&D investments," Oh says. "I demonstrate that a firm's investments in R&D not only contribute to innovation per se, but also its ability to effectively absorb useful innovative activities of peer firms, namely technology spillovers. High R&D investments therefore likely create extra value for a firm going forward.

"However, I find that the stock market does not fully recognize the value of R&D and thus cannot incorporate this value-relevant information into stock prices immediately, leading to the undervaluation of firms with high R&D investments and high spillover exposure," he says.

Dr. Michael Rebello, Susan C. and H. Ronald Nash Distinguished Professor and PhD coordinator for the Finance and Managerial Economics Area, lauds Oh's work. "Jong-Min was a pleasure to work with," he says. "His dissertation, which includes two promising papers, is entirely the result of his creativity and hard work. All my colleagues join me in wishing him well and have high expectations of him."

Oh earned a law degree from Korea University and an MS from the University of Rochester before completing his PhD. He also served as an economist at the Bank of Korea from 2006 to 2009, during which time he published several research papers. Oh also has presented research papers at numerous national and international conferences.

