

# YOUR IOWA STATE

STORIES OF TRADITION AND TRANSFORMATION

WINTER 2017

Image: John Lund - Getty Images



## Business in the Big Data Age

**In a business world awash in data, getting and staying ahead often requires finding the proverbial drop of insight in an ocean of information.** At Iowa State, researchers are diving deep into this sea of numbers to help companies understand and benefit from the data around them in ways that will make them more efficient, more secure and more profitable – and, most of all, better able to serve their customers.

“As the demand for data-savvy workers has skyrocketed, Iowa State has moved in sync with the need,” says David Spalding, Raisbeck Endowed Dean of the College of Business. “We’ve made a series of hires in the area of data analytics,” he says. “Combined with our historic strength in areas such as supply chain and technology, we believe

we’re more able than ever to help businesses with the variety of challenges they have.”

College of Business researchers across multiple disciplines are teaming up to find the best approaches to help organizations leverage data to their greatest advantage.

For example, Sree Nilakanta, associate professor of information systems and Kingland Graduate Director of Business Analytics, along with his colleague Kevin Scheibe, associate professor of information systems, are studying more than a decade’s worth of maintenance data on hundreds of snowplows owned by the Iowa Department of Transportation. Because the DOT pays about \$200,000 per plow-equipped dump truck, the agency is eager to squeeze every last ounce of snowflake-scooping productivity from the vehicles.

Faculty and students in supply chain and information systems are examining ways that the DOT can use data from its statewide highway and road video camera feeds to monitor, categorize and quickly disseminate information about road conditions. Such information can help truckers get their freight across the state more quickly, or help motorists make better decisions during rush hour and during bad weather, perhaps even saving lives.

As the world moves forward, the organizations poised to succeed are the ones that can take advantage of the data being generated in ever-growing volumes. And Iowa State’s interdisciplinary, collaborative culture uniquely positions the university to help everyone benefit from the insights being unlocked in these data.



## Where the Data Meets the Road

As transportation asset management administrator for the Iowa Department of Transportation, **Matt Haubrich** spends a portion of his days looking at how to optimize investment in all the cars, trucks and other vehicles that maintain Iowa's highways. When he approached Iowa State associate professor and Kingland Graduate Director of Business Analytics Sree Nilakanta, he wanted to find out if the state was keeping its snowplows on the road too long – or not long enough.

As he helped Nilakanta get up to speed, Haubrich found himself fascinated by more than just the potential solutions. “Sree

and his team were approaching problems in really interesting ways,” he says.

He realized he wanted to absorb the professor's entire way of problem-solving. An Iowa State graduate with a bachelor's in statistics and an MBA, Haubrich enrolled in the university's Master of Business Analytics program.

He's already implementing what he's learned, such as using vehicle-based cameras to improve driver safety. “It seemed like something that only a company like Google could do,” he says. “Now I know that a lot of pie-in-the-sky ideas we've had are more feasible than I ever thought.”



Photo: Paul Gates

## Another Year, Another Record

December 2016 commencement at Iowa State broke yet another fall semester graduation record with

**2,136 GRADUATES!**

That breaks down to about 1,759 bachelor's, 257 master's and 120 doctoral students.

## Iowa State Comes Out On Top

Money ranks Iowa State as the

# #1

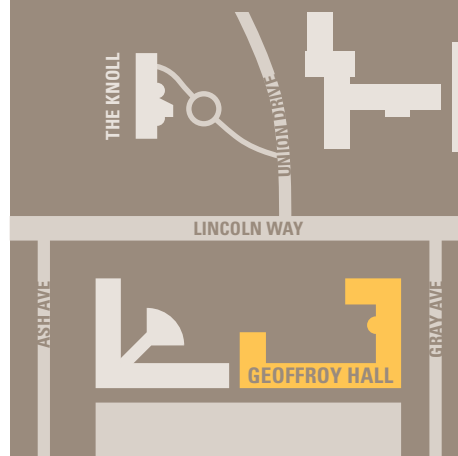
**PUBLIC UNIVERSITY**

for out-of-state students!

## Fast Facts:

### GEOFFROY HALL

- Eight floors
- 784 beds
- Newest residence hall on campus
- Named after Iowa State's 14th president, Gregory Geoffroy



## Campus Lovebirds

In 1954, the first couple was married in the Memorial Union chapel.





Photo: Dan McClanahan

## Brand New Marston

The renovations are complete! After almost two years, the College of Engineering celebrated the finished project during a rededication ceremony on Sept. 29, 2016. Students and alumni shared how Marston Hall played a role

in their Iowa State experience, which was a perfect tribute to kicking off a new era for the building. The great-great-grandson of Anson Marston, Nicholas, also participated in the day's activities.



*Make sure to stop by the new facilities next time you're on campus!*

## Getting the Wheels Spinning

The CyBike studio space in the armory on Iowa State's campus practically vibrates with energy and ideas. The project is just one example of the kind of collaborative, hands-on projects students expect to engage in at Iowa State to prepare them to be creative, contributing team members in their careers.

Spearheaded by then-industrial design graduate student Mark Kargol, now a lecturer in the College of Design, the CyBike project has involved about 150 students in 11 academic majors who built the system from the ground up over the past three academic years.

One of these students is Kelly Jo McConoughey, an industrial design senior from Livonia, Michigan. She helped design parts for the metal docking station digitally, in collaboration with mechanical engineering students, then worked directly with a fabrication company to bring the design to life. "This project is so real world," she says. "It's easy to design a bike, but then to build it and determine how it will work in real-time was an eye-opener!"



Photo: Paul Gates

*"Spokes"-persons Kelly Jo McConoughey and Jared Morford get ready to take CyBike out for a spin.*

CyBikes are likely to be available on campus starting in fall 2017. Plans call for 350 bikes that can be checked out or returned at one of 700 electronic self-serve docking stations. And not only will Iowa

State gain a bike share system tailored to the needs of its students, but students are getting the chance to invest their ingenuity and energy into shaping their campus for the future.

Welcome to **YOUR IOWA STATE**,  
the newsletter that keeps you connected  
with **Iowa State University**. Look inside to  
find out what's happening on campus as  
well as to relive some of your own Iowa  
State memories.

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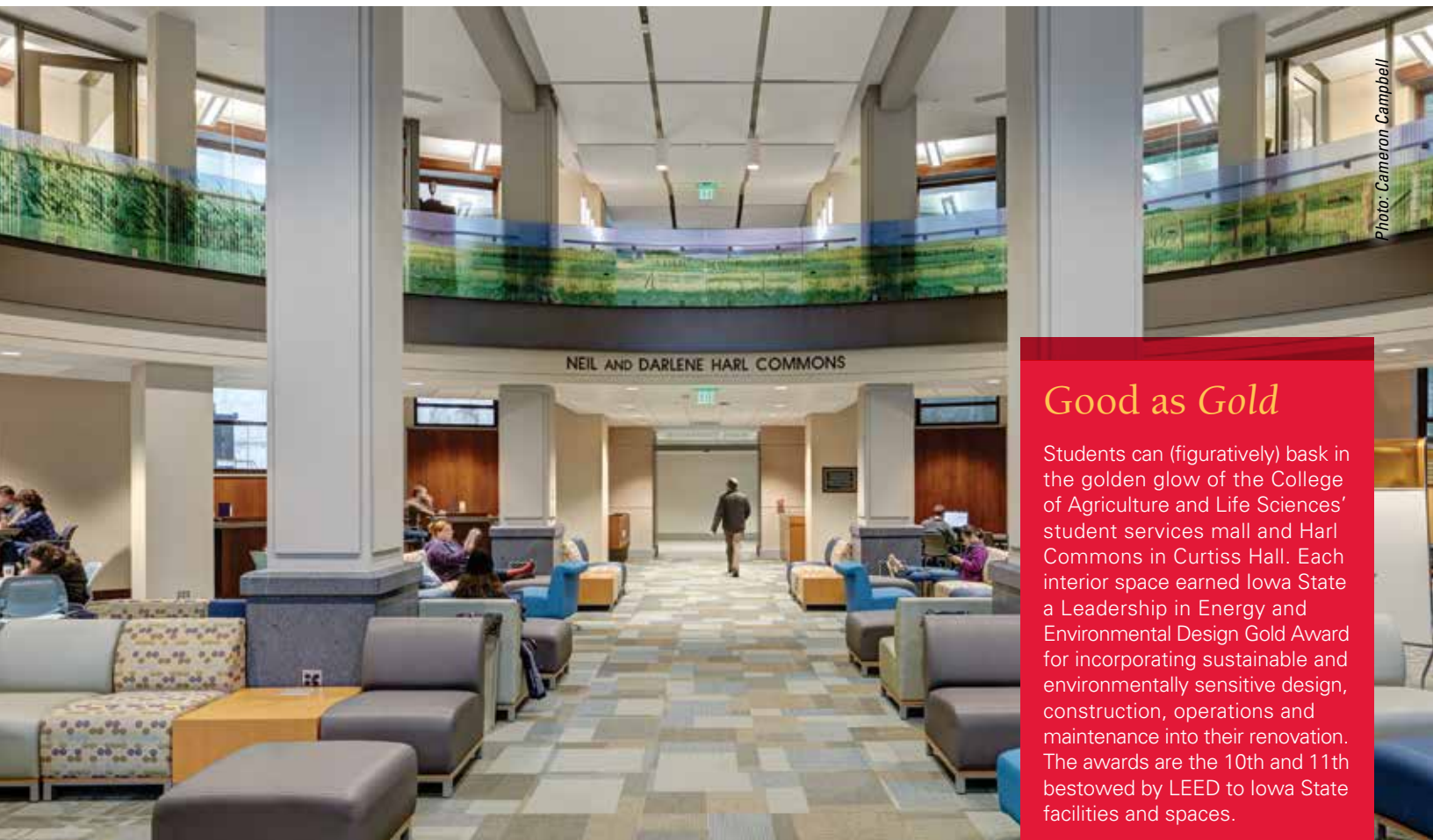


Photo: Cameron Campbell

## Good as Gold

Students can (figuratively) bask in the golden glow of the College of Agriculture and Life Sciences' student services mall and Harl Commons in Curtiss Hall. Each interior space earned Iowa State a Leadership in Energy and Environmental Design Gold Award for incorporating sustainable and environmentally sensitive design, construction, operations and maintenance into their renovation. The awards are the 10th and 11th bestowed by LEED to Iowa State facilities and spaces.