On a recent morning in New Orleans, undergraduate student Alex Dolmseth headed to the historical neighborhood Tremé, a camera, clipboard, cell phone and map in his hands. The map Dolmseth carried showed property conditions of Tremé, which he developed as part of an ongoing critical survey project designed to give communities and governmental institutions a way to freely access urban data that would otherwise be expensive or hard to obtain.

"The Tremé has played an essential role in creating the cultural and diverse city that New Orleans is today," says Dolmseth.

Dolmseth recently won first place at InnovateUNO, a juried undergraduate research, scholarship and creativity showcase that debuted at UNO last year and sends winners to the University of Louisiana System's annual Academic Summit, a similar competition at the statewide level. His project, "Looking Back at the Future of Tremé: Using GIS and Smartphone Applications to Evaluate Historic Property Conditions and Land Use for Expanding Community and Economic Development," won first prize in the oral competition.

The Historic Faubourg Tremé neighborhood, or Tremé, is one of the oldest neighborhoods in New Orleans and the first neighborhood for free African-Americans in the United States. In his InnovateUNO project, Dolmseth outlined work he had done as an intern with WhoData.org, a collaborative public participation geographic information systems (GIS) project supported by the University's Department of Planning and Urban Studies. Michelle Thompson, founder of WhoData.org and an assistant professor of planning and urban studies, sponsored the project.

Through WhoData.org, Thompson and her team have previously worked on projects in the Hoffman Triangle neighborhood, where they inspected street conditions and working lights around the neighborhood and collected data that suggested a correlation with reported crimes. As a result of this investigation, government officials addressed the situation fixing the broken lights in the neighborhood. Other projects have helped the City of New Orleans to assess blight and identify a critical need for grocery stores in poorer neighborhoods.

Together with Thompson and local historian Dabne Whitemore, Dolmseth used GIS and smartphone applications to develop a survey of historic conditions in Tremé. Now, the three are working on developing an easy-to-use, self-guided walking tour of the area that will be accessible through iTunes.

In his InnovateUNO presentation, Dolmseth outlined the relationships between smartphone mobile applications,
or "apps", and their use as economic growth tools for city neighborhoods. He also described how residents of the community can expand their role in community engagement.

The Tremé app he is developing will introduce people to historic places and entertainment venues in Tremé and educate them on the distinctive architecture of the neighborhood, says Dolmseth. White more explains the tour as a way to "look at the architecture of the houses in the Tremé and get a feel of the history in this place."

Thompson looks at the project as a way to show the positive side of Tremé. For a while, she says, the neighborhood has been subject to criticism and suffered a bad reputation, but she wants to show people that it is indeed a wonderful place with both historic and economic value.

"I think undergraduate research is very important," says Steve Johnson, dean of the College of Sciences and UL System Undergraduate Research Council representative.

"It's important at all universities, but I think it's especially important at UNO, because it engages undergraduates and gets them involved in the university, it allows them to become engaged with their faculty mentors. They also become engaged with fellow undergraduates and also graduate students in the research experience, so it's a very critical thing and something that I'm very passionate about."

The aim of InnovateUNO is to improve undergraduate student success through engagement in research, scholarship and creativity and to help students build skills for further academic and career success. The showcase, held each spring at the University's Earl K. Long Library, is also designed to help students gain interest in advanced scholarly research and encourage them to build skills needed to attain grant funding.

Research is described broadly, in terms of any project that involves creativity or scholarship, says Johnson. Winners of this year's InnovateUNO competition included a marketing presentation testing the effectiveness of sports ads; an exploration of the effects of Christianization among indigenous communities of Kongo and the former British colony of Lower Canada; a laboratory evaluation connected to ongoing coastal restoration projects; nanotechnology projects and graphic art and sculpture exhibits.

Students involved in a project that involves research, scholarly work, creative work or service learning present their work in a poster, oral presentation, art display, performance or screening at InnovateUNO.

InnovateUNO and the UL System's Academic Summit include a juried art exhibit competition, as well as a service learning component and categories for more traditional academic research, such as psychology, education, biological sciences, chemistry, humanities and history.

"I think this is a good opportunity for us to get experience at the undergraduate level in research and presenting research," says Glenna "Marty" Richmiller, who, together with fellow marketing major Charles McMasters, presented findings on promotions done for New Orleans Privateers men's basketball games.

Opposite page: Assistant Professor of Planning and Urban Studies Michelle Thompson, undergraduate student Alexander Dolmseth and historian Dabne Whitmore discuss Dolmseth’s research project in Tremé.

Below left: For the past two years, undergraduate Nooraldeen Alkurd has submitted poster presentations related to nanochemistry. This year, he won fourth place.

Below right: Undergraduate Kashanda Foley unveils her work with the LSU Health Sciences/New Orleans Schools Science Partnership Program, an education initiative aimed to encourage more STEM students.

Undergraduate marketing students Jeremy Sanders and Stephanie Morgan used Starbucks Coffee as a case study for their presentation "The Effect of Scarcity on Consumer Purchase Intentions," which won first place in February in the poster contest at InnovateUNO.

Hear faculty and students share their experiences with Innovate UNO and see more photos at magazine.uno.edu