Spartan Engineer’s MSU Guide app is making it easier to navigate MSU’s sprawling campus

A new student-designed app is making it easier for those with disabilities to navigate Michigan State University’s sprawling campus.

A partnership between the College of Engineering and the Resource Center for Persons with Disabilities, MSU Guide was designed to help those with mobility and sensory challenges maximize their Spartan experience. MSU Guide is recommended in Apple’s app store when users are located near campus.

“MSU Guide gives people, especially those with disabilities, a new sense of confidence,” said Michael Hudson, the center’s director. “We understand learning to get around campus is challenging, so this is an important step in helping people feel empowered to take on this environment by themselves.”

Launched six months ago, but recently redesigned, MSU Guide has been downloaded more than 6,000 times and has been opened nearly 100,000 times, said graduate student Adi Mathew.

Mathew started designing the app as a senior in electrical and computer engineering. He is now a graduate student in computer science and media and information, focused on human and computer interaction.

“Guide’s success so far is very humbling and at the same time it’s a good indicator that we’ve made something many find useful,” said Mathew. “An engineer can create some pretty awesome stuff but if it’s not useful what good is it? When people find use for the things we build, it’s all worth it.”

The highest number of downloads came at the beginning of classes, he said. MSU included information on MSU Guide in its Academic Orientation Program, where it was opened 12,000 times in one day.
“Much of the college transition is about navigating and stepping outside your comfort zone,” said Marybeth Heeder, director of the program. “But if you have confidence, the transition will be easier.”

For blind users, the app works in tandem with a text reader, and it offers a wand feature, which allows people to point their phones in all directions to learn what’s around them.

For those with physical challenges, the app provides accessible entrance information for buildings so people can determine whether doors have handles, whether ramps are available or whether there are stairs.

While most advantageous to students with disabilities, MSU Guide is beneficial to all students, especially freshmen, but also those with temporary injuries and those with autism who may have unique navigational challenges.

Private donations to the Resource Center for Persons with Disabilities, as well as funding from the Office of the Provost, have supported the development of MSU Guide, Hudson said.

The center is looking at other uses for the app, including adding locations for art on campus and making the programming publicly available. It’s quickly gaining interest among other Michigan universities, he said.

MSU has about 1,800 students with disabilities, and the Resource Center for Persons with Disabilities assists nearly 2,000 students and staff each year.