UC San Diego News Center

By Jade Griffin and Lily Chen   Mar 07, 2019

Parking on Campus? There's an App for That!

You are driving to campus. As you get close, you begin to wonder if you will find parking. Now, there's an app for that: the UC San Diego official mobile application.

UC San Diego's IT Services recently partnered with Resource Management and Planning (RMP) and UC San Diego student developers to create a Parking Guidance/Availability feature on the existing UC San Diego mobile application. The app shows users how many open spaces are available in selected campus parking lots. The technology—which breaks out the percentages of available S, B and A spots —is currently active in Osler Parking Structure and Lot P406, next to Sixth College. RMP is working to expand the functionality campuswide.

"Real-time parking availability information reduces congestion, gas consumption and time spent searching for parking," said Josh Kavanagh, director of Transportation Services. "By enabling UC San Diego drivers to locate vacant parking spaces on their Android or iPhone devices, this app works hand-in-hand with other operational measures we are taking to improve the campus parking supply and predictability. With campus shuttle information also available in real time, the UC San Diego mobile app is quickly becoming an all-in-one mobility tool for commuters and campus residents alike."

IT Services enlisted student developers to help with the project, which uses cameras embedded with artificial intelligence (AI) to determine which parking spaces are available. The students, primarily from the Department of Computer Science and Engineering, were able to help design and develop the new app feature as they gained real-world experience on a project that benefits the entire campus community.

Antonio Martorana is a third year mathematics and computer science double major who worked on the project. "I loved every second of it from conception to employment," said Martorana. "It was great learning new technologies and being exposed to a real project that impacts and benefits students, faculty and staff every day."

According to IT Services mobile team lead Alex Wu, the collaboration with UC San Diego students is mutually rewarding and beneficial. "Students can apply their academic learning to real-world problems and gain industry experience," said Wu. "We benefit from the enthusiasm, energy and perspectives our students bring to the work. They also help us stay more in tune with the needs of the student population and provide us an effective channel to reach out to their peers."

Beyond the parking functionality, IT Services' vision for the UC San Diego mobile app is to provide a personalized experience for all students, faculty, staff and alumni. While other campuses have mobile apps, many contract with technology vendors to support their mobile platforms, which locks them in to a specific set of functionalities, or they may have multiple apps supported by multiple vendors. UC San Diego leveraged data feeds from multiple platforms and integrated them in a single mobile app tailored specifically to the UC San Diego campus. The technology is open source, so a student or staff developer can also contribute to the code. Brett Pollak, director of Workplace Technology Services, points out that this strategy allows IT Services to customize the app to meet the specific needs of the UC San Diego community.

For instance, IT Services recently partnered with Basic Needs and UC San Diego Catering to send notifications over the app to alert them when food from campus events is left over. Students who may be food insecure can opt in to receive the alerts, and pick up free food that might otherwise have
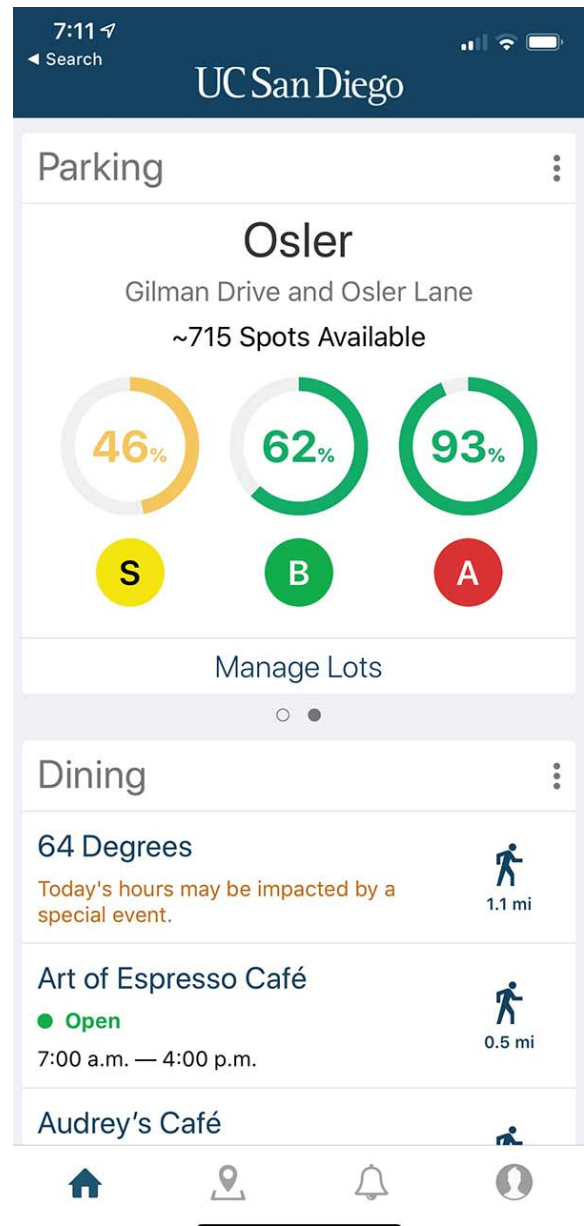
Photo by Erik Jepsen/UC San Diego Publications

gone to waste.

"We want to make the app a one-stop shop, so it has everything campus community members need, based on their login as a student, faculty, staff or alum," Pollak said. "We've made a lot of progress in the last year on the app. But there is a lot more to come, with some exciting enhancements that we will be integrating to further support our students academically."

The UC San Diego mobile app supports both Android and iOS and can be downloaded for free in your phone's app store or by visiting mobile.ucsd.edu for more information.

For ongoing information about changes to parking lots and the transportation services that you use most, campus community members can sign up for First to Know email notifications.

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