Students win challenge for real-time traffic app

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Zedd Shmais, James Staud and Nhat Tran, UT Arlington seniors in computer science and engineering, designed a winning app in the NTxApp Challenge. Credit: UT Arlington

Three University of Texas at Arlington Computer Science and Engineering students have won a $10,000 prize in the NTx Apps Challenge for a smart traffic light network that adjusts traffic light schedules to make traffic flow more efficient.

GridLock was developed by Zedd Shmais, James Staud and Nhat Tran. All are seniors from Fort Worth.

The team created a real-time monitoring system that analyzes [traffic conditions](#) and enables better vehicular flow.

"We are elated," Staud said. "We wanted to do something to ease traffic congestion and reduce [traffic jams](#)."

The system collects information about traffic, and then uses computerized data mining to enhance the timing of [traffic](#) lights in real time. See a more complete project description here.

In addition to the prize money, the team will receive mentoring from Jorge Varela, assistant director of TECH Fort Worth and Gemalto, a sponsoring company. There are no restrictions on how the money can be used.

"We are thrilled. Our hard work has finally paid off," Shmais said. "We are planning to further pursue this idea and bring the app to our streets."

The NTx Apps Challenge was a 10-week innovation competition that concluded earlier this month. Its aim was to develop web and mobile apps that solve regional challenges in four major subject areas: water conservation, waste reduction, energy efficiency and transportation.

The UT Arlington team won in the Internet of Things category, which was sponsored by Gemalto. Gemalto is an international digital security company. This category utilized the Gemalto Concept Board or the Gemalto SensorLogic Application Enablement Platform. Submissions in this category also had to address one of the other four challenges.

The North Texas Commission founded the competition with organizing partners Dallas Entrepreneur Center, The Cleanweb Initiative and the University of North Texas Discovery Park.

Eric Becker, senior lecturer, undergraduate adviser for the CSE Department and team adviser, said he's especially proud of the team because more than 100 teams entered the competition. Only five teams received cash awards.

Staud also is president of the UT Arlington Mobile Systems Development, or Mobi, team and has started as a National Science Foundation Research Experiences for Undergraduates intern in the Heracleia Lab in the Engineering Research Building.

Shmais is the android program manager at Mobi. He also was on the UT Arlington team that won the AT&T programming competition last year with a $10,000 grand prize. He interned at AT&T Dallas in summer 2014.

Tran also is a Mobi member. He interned at USAA prior to starting the new academic year.

Provided by University of Texas at Arlington