Welcome to the D2K Lab Newsletter!

We are excited to bring you a snapshot of some of the most recent activities and events from the Rice D2K lab. The D2K Lab is a campus hub for data science experiential learning and research. We bring together students and faculty from across the university and connect them with real-world problems and opportunities in data science.

D2K Alum Speaks with Houston City Council

In Fall 2019, the Houston Fire Department sponsored a student team in Rice University's Data to Knowledge (D2K) Learning Lab. The student team known as Team Fire, analyzed more than 2 million emergency calls and made recommendations about the optimal place to put ambulances, fire engines and other resources to cover the city's 654 square miles. The analysis by Team Fire, five statistics majors who graduated in May, took first place in the D2K Lab's spring showcase in April, and found:

- HFD already did a good job of staging resources
- The purchase of five new ambulances could improve service in portions of southwest Houston, cutting response times by an average of 10 seconds.

Several team members continue to meet with and work with HFD officials to refine the results and answer additional questions, like: What is the impact of a patient
choosing a specific hospital over being taken to the one closest to the scene of a fire or accident?

Team Fire's Ashwin Varma '19 presented the team's work to the Houston City Council's Public Safety Committee on August 13 at City Hall.

Read More...
Unraveling an Engine: Quantifying the effects of fuel additives in diesel engines

Spatial Mapping of Fly Brain Gene Expression

Gone with the Wind? Impact of Meteorology on Air Pollution in Houston

Optimizing Placement of Emergency Vehicles for the Houston Fire Department

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**Our D2K Showcase highlighted the diversity of data science projects that students are working on with our Affiliate member sponsors, and the real-world impact students are making.**

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**First Place Winner**

Team Fire: Optimizing Placement of Emergency Vehicles for the Houston Fire Department.

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**Honorable Mention and Audience Choice**

Team FBI: Preventing Foodborne Illness at Houston Area Restaurants

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Congratulations to all our teams!

Interested in sponsoring a D2K Learning Lab student team? Learn more [here](#).
The Data Visualization Contest held this past April brought in some great entries. Cash prizes were awarded to the top three winners!

First Place: *pilotPlan*: A Temporal Map of Brasilia by Faras el-Dahdah, et al.
Second Place: Statistics on Statistics Students by Yifei Hu
Third Place: Perceptual Accuracy of Complex Tactile Cues by Jenny Sullivan

Data Science Welcome Party: Record-Breaking Attendance

Students interested in data science research and opportunities packed in to the LILIE space for a welcome back pizza party. Information on the D2K Lab course offerings and opportunities to get involved in data science at Rice were highlighted. Look out for information for Spring 2020 courses!
Upcoming Events

- D2K Lab Distinguished Speaker - Nov 22, 2019
- D2K Showcase - Dec 4, 2019
- Rice Datathon 2020 - Jan. 24-25, 2020

Get Involved!

Companies and Community Partners

We provide a customized affiliate program for our partners:

- Networking events with data science students.
- An invitation to the D2K Learning Lab Showcase, Rice Datathon, and more!
- Branding on the D2K website and other program materials.
- An invitation to serve as a judge or mentor for D2K competitions or projects.
- An opportunity to propose D2K Learning Lab projects

Alumni

- Support a D2K Learning Lab research or community engagement project or student team. Ask about naming opportunities.
- Volunteer to mentor a D2K Learning Lab student team, a Datathon 2020 team or skills workshop.
- Network with data science focused alumni and students.
- Join our mailing list and receive our D2K Newsletter and information on news and events.
- Be a judge at our D2K Learning Lab Showcase, Visualization Contest or Datathon competition.

Students

The Rice D2K Lab provides students with immersive, experiential learning opportunities in data science while
enhancing data-intensive research at Rice and building partnerships with companies, institutions, and community organizations.