SPRING 2021

DEPAUL CENTER FOR DATA SCIENCE

IN THIS ISSUE

DePaul | COLLEGE OF COMPUTING AND DIGITAL MEDIA

Faculty and Students News

- **A Finalist in Transportation Data Analytics Challenge** - Bhooma Shivakumar, a graduate student in Data Science at DePaul University, has become a finalist at the Student Data Challenge on Urban Travel Time, Speed, and Reliability organized by the National Academies of Sciences, Engineering, and Medicine - Transportation Research Board (TRB) Joint Subcommittee on Travel Time, Speed, and Reliability.

  The main challenge of the project was to develop a data-driven methodology to assess the impact COVID-19 has had on the transportation networks. In this project, Bhooma and her advisor Dr. Ilyas Ustun analyzed the effect that COVID-19 has had on driving behavior in Austin, Texas. It was found that the crash count was significantly lower in 2020 compared to 2019. Even though there was a significant drop in the number of crashes, the number of fatalities increased by 14% in 2020. Meanwhile, the average speed in Austin increased during the pandemic and was higher in 2020 than in 2019. The largest increases in average speed occurred during the mornings between 7-9 AM and evenings between 4-6 PM. These changes in crash count and speed were observed to be the strongest with the onset of the lockdown in March and waned off as the pandemic progressed. The project has been presented at the 100th Annual Meeting of TRB held virtually on January 26th, 2021.

New Publications

- Yang, Z., Akiyama, T., Williamson, K. S., Franklin, M. J., & Ramaraj, T. (2021) Thresholding Approach for Automatic Detection of Pseudomonas aeruginosa Biofilms from Fluorescence in situ Hybridization Images. International Journal of Biomedical and Biological Engineering, 15(1), 21-27

- Lucas, M., Lerma, M., Furst, J., & Raicu, D. (2021). Robust Heatmap Template Generation for COVID-19 Biomarker Detection. EAI Endorsed Transactions on Bioengineering and Bioinformatics, 1(2), e4.

- Cao, F., & Brown, E. T. (2020). DRIL: Descriptive Rules by Interactive Learning. In 2020 IEEE Visualization Conference (VIS) (pp. 256-260). IEEE.

- Govindaswamy, A. G., Montague, E., Raicu, D. S., & Furst, J. (2020). CNN as a feature extractor in gaze recognition. In 2020 3rd Artificial Intelligence and Cloud Computing Conference (pp. 31-37).

UPCOMING CAREER FAIRS

- **Spring Career Fair 2021**

  Thursday, April 8, 2021, 3:00pm - 6:00pm CDT

  Description:

  Grow your future at the Spring Career Fair!

  The Career Center invites all students + alumni to the virtual Spring Career Fair. Meet top employers (via video chat) from a variety of industries recruiting for jobs and internships, and learn about career paths available to you.

  Students + alumni from all majors are invited.

  This virtual fair will take place on Handshake. Complete your profile so that employers can find you.

  Questions? Email: recruitstudents@depaul.edu

- **Hire Big Ten+ Virtual Career Fair**

  Tuesday, April 20, 2021, 2:00pm - 6:00pm CDT

  Description:

  This event is open to all enrolled students at member schools of the Hire Big Ten Plus Consortium and recent alumni. Student registration will open on Monday, March 22! Register for this fair to attend 10-minute 1:1 sessions and group information sessions with premier employers across the country.

  This fair will be held virtually using the Handshake virtual career fair platform. Prior to the fair-
  - Update your Handshake profile & set your profile to "public"
  - Upload your current resume
  - Attend Handshake-hosted training session on April 13th.

  If you have immediate questions or concerns, contact your career center or schedule a virtual career advising appointment.

- **Spring Interview Day**

  Friday, May 21, 2021, 9:00am - 5:00pm CDT

  Description:

  The description of this career fair has not been released. More information please visit DePaul Career Center.

DePaul Center for Data Science

CDS & IBM Z Hackathon

Date
May 7-11, 2021

Description

The **DePaul Center for Data Science** and **IBM Z** are sponsoring Hack4Space, a Hackathon geared toward leveraging space data to solve a problem as identified by the student teams. The virtual event will take place between May 7 and May 11. The hackathon is open to DePaul students who want to test their entrepreneurial spirit, collaborate with data scientists and other technologists, and strut their non-technical skills like product management, project management, marketing, and business leadership to solve wicked problems in a practical way that also makes the world a better place. IBM Z & DePaul will provide training, systems access, and help students identify a team if they have not established one before the deadline. Students can expect to learn more about design thinking, a free cloud solution from IBM Z that's open to all students from across the globe, data science, space technology, and pitching like a pro in a half-day virtual training (also free). Speakers include Melissa Sassi, Chief Penguin – IBM Z, Student & Entrepreneur Experience, Naeem Alaf, Distinguished Engineer & CTO IBM Space Technology, among others.)

More details about the event will be posted on the Center for Data Science website in **early April**.

CDS Alumni Panel

The CDS Alumni Panel event was successfully hosted on February 19, 2021. Four featured alumni from the DePaul Data Science Program provided guidance to students by sharing their educational experiences at DePaul, as well as how they built a career path that led them to the successful positions they currently have. Over 30 students and faculty joined this virtual event.

Voted by his employer Ingredion Inc. as 2019 Professional of the Year in an organization of over 11,000 employees, **Aaren Stubberfield** is a Data Science professional and online course author. With a diverse background, including Sales, R&D, Procurement, and Supply Chain, Aaren now holds the title of Manager of Data Governance and AI. He is responsible for playing a pivotal role in Ingredion's strategy around data governance and leading a team of developers to deliver AI and machine learning projects. After receiving a master's in Predictive Analytics from DePaul in 2015, Aaren used his experience and expertise to develop courses in "Supply Chain Analytics" and "Joining Data with pandas" on the online learning platform for Data Science, DataCamp.com. Over 14,000 students have participated in these courses. LinkedIn: https://www.linkedin.com/in/aaren-stubberfield/.

Ke Feng currently works as a Data Scientist at Aon in Chicago. Before joining Aon, she completed her M.S. in Data Science at DePaul and holds a B.A. degree in Political Science and Media Studies. She developed her interests in computer programming and Data Science through DePaul's program and gained her practical training through an internship course. Her current work involves extensive modeling on patent data, visualization, and NLP. LinkedIn: https://www.linkedin.com/in/fengke910/.

Laura Floyd is a Marketing Science Partner at Facebook, working with the platform's top advertisers in adopting better measurement as a way to improve business outcomes. Prior to joining Facebook, Laura worked in data science and analytics within the advertising and market research industries at Leo Burnett and Kantar TNS. She is a "Double Demon," having earned both her undergraduate (Marketing) and masters (Predictive Analytics) degrees from DePaul University. Additionally, she was the inaugural recipient of the DePaul University Department of Marketing "Young Alum of the Year" award in 2015. LinkedIn: https://www.linkedin.com/in/laurafloyd/.

Ray Li attained a Master of Science degree in Predictive Analytics from DePaul University and is currently a data scientist at Amazon Web Services (AWS). At AWS, he helps customers to realize desired business outcomes using machine learning, such as computer vision, natural language processing and time series forecasting. Prior to AWS, he worked on computer vision applications in the auto insurance and the automotive space where he helped develop the first AI-enabled vehicle collision estimate technology in the world. Outside of work, Ray enjoys taking fitness classes and reading non-fiction literatures. You can learn more about Ray at https://taihuali.com. LinkedIn: https://www.linkedin.com/in/taihuali/.

Umaima Khurshid Ahmad

I am Umaima Khurshid Ahmad from Pakistan. Nice to e-meet whoever is reading this. I am currently pursuing my Master in Data Science from DePaul University. Before stepping into this degree, I was working for three years as a Software Engineer in Healthcare.

What makes you interested in the GA position at the Data Science Center?

I'm thrilled with the opportunity to work as a graduate assistant at the Data Science Center, and I believe working with highly skilled facility members will broaden my knowledge in this field. As Data Science is an evolving field, I would have better research insights across different projects under the DePaul Data Science Center. Working for this position would allow me to give back to DePaul University and CDM using my academic knowledge gained through CDM Data Science.

What brings you to the MS Data Science program?

My past experiences of working in Health-Tech with raw data by generating patterns of common diseases across Pakistan made me realize the potential of extracting meaning from data. It also made me more passionate about how data can impact social-economic growth and transform our daily lives. This passion drove me to land in choosing a graduate degree in Data Science.

How do you feel about the MS Data Science program so far?

I love the MS Data Science program as each course in it teaches the base ground to solve actual real-world problems with data while at the same time helps me to build my portfolio in Data Science.

INDUSTRY MISSION

To seek partnerships with industry, governmental, non-profit organizations and other universities to conduct joint projects and to provide students with practical real-world experience in data science.

CONTACT US

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