PRESIDENT PESCOVITZ'S REMARKS

- Good morning…

- Thank you, Michelle. I just want to take a moment to recognize Michelle Piskulich for her outstanding work as Interim Provost.

- And thank you to the center's co-directors, Professor Sugumaran and Professor Khattree, for coordinating this timely virtual symposium.

- The mission of the Center for Data Science and Big Data Analytics is clear:

  o As scientists, we all recognize the power of a multidisciplinary data research approach that integrates findings from biological and biomedical sciences along with research in mathematics, statistics, engineering, business and finance.

- As we find ourselves in the throes of a pandemic, there is no question of the paramount value of data science and the pressing need for predictive analytics models to prepare for possible COVID-19 surges.

- Since the first U.S. case was reported in late January and first case in Michigan appeared in mid-March, it is clear to all that we must be better prepared at identify pandemic threats[1], responding to the threat, and in conducting more efficient research so we can respond more promptly.

- The healthcare industry, among others, use big data and predictive analytics to better understand the COVID-19 and its spread.

  - The predictive models have helped gain insight in the COVID-19 risk, disease outcomes and the potential impact of the virus on a healthcare system that is severely under stress.

- It is clear that herd immunity is not a sensible or humane approach in dealing with the virus spread.
  - We must slow down the contact rate with social distancing and take preventative measure such as wearing a mask.
  - And, we must create data-driven models that help us understand the surges and dips of COVID-19 infection rates.

- At Oakland, we have implemented "Grizzlies Protect Grizzlies: Healthy Together," a five-point plan that aims at quickly identifying potential COVID-19 cases, limiting outbreak, modifying campus and building trust with our community so we can rely on each other...and protect each other.

---

[1] There have been 136,000 cases and 7,052 deaths in Michigan, and 7.2M cases and 205,000 deaths in the United States. (As of Sept. 29, 2020)

- o As a whole, each part of the plan is inextricable from other parts. But there's no doubt that compliance, trust and respecting the health of everyone is essential.

- Today's symposium underscores the many ways data science and analytics provides insight into the health, environmental, economic and industry challenges of the unfolding 21st century.

- The power of data has made products more consumer friendly, and given many companies an edge in the consumer marketplace, including those companies in the transportation and hospitality industries.

- Like you, I am a firm believer there is a higher calling for data science and big data analytics.

- We must learn from the breadth and speed of the spread of COVID-19, and must be prepared for predictable and unexpected threats to public health.

- Data science and big data analytics is having – and will continue to have – d an impact on how we confront serious issues, including epidemics, pandemics, over-population, pollution and climate change.

- A recent study by <u>NASA Technical Reports Server (NTRS)</u>[2] provides an in-depth look at how massive amounts of data can be leveraged and analyzed to generate viable solutions to the threat of climate change.

- As the report claims, climate science represents a big data domain that is experiencing unprecedented growth. The challenge lies in better understanding the implications of these vast datasets and deploying the right computational resources to build and deploy useful applications.

- As scientist, we all share the quest of finding the truth and making the world a better place. Clearly, the emerging role and prominence of data science and big data analytics play a central role in that quest.

- On behalf of the Oakland University community, we are so proud of the work of the OU Center for Data Science and Big Data Analytics, and its goal of finding solutions to deal with the urgent challenges of the day.

- Thank you for participating in the virtual symposium.

---

[2] https://ntrs.nasa.gov/citations/20160002946