

Office of the Provost Newsletter

May 19, 2021

Academic Affairs Leadership Team (AALT) Reports

Artis College of Science and Technology

DATA AND INFORMATION MANAGEMENT STUDENTS PRESENT INNOVATIVE CAPSTONE PROJECTS

Data Science is rapidly changing the world. From the business world to daily life, the terabytes of data generated every minute has the potential to revolutionize the way things are done. Students in Radford University's Data and Information Science Management Master of Science program are exploring new ways to cultivate, collect, curate, clean, and control the flow of this treasure trove of data to create useful products and procedures. Employing many data engineering skills acquired over their time in the program, five graduate degree candidates recently presented capstone projects that ranged from gaming to health to business intelligence at the 2021 DAIM Graduation Celebration held April 19th.

"I am impressed that each student built an end-to-end data pipeline to ingest, prepare and process, store, and visualize multiple datasets" stated Dr. Jeff Pittges, program coordinator. "These five students accomplished more than we envisioned when we first imagined the program."

The projects:

How Price Influences Customer Reviews by Michael Hammond

The PC gaming platform Steam built a successful business by frequently discounting and slashing prices. General consensus in the gaming community associates price cuts with positive user reviews. This presentation not only shows a relationship between price changes and review scores, the research also shows a relationship with community interaction.

Analyzing Virginia's Public COVID Data by Hari Talari

Since the start of the pandemic, the Virginia Department of Health (VDH) has been a primary source of the Virginia's COVID-19 data. The VDH collects data on new cases, hospitalizations, and deaths. The data includes information on age group, county, health district, and other properties. The VDH data impacts decisions made by the state, local communities, and individuals regarding lockdowns, hospital preparation, funding, and whether it is safe to get groceries. This presentation describes the publicly available VDH data and makes recommendations to improve the data to enable critical analysis.

Using Big Data to Enhance Small Businesses by Zachary Bryan

Business Intelligence helps people and organizations make better decisions. Until recently, only large companies had the resources to take advantage of business intelligence. Today, even the smallest organizations are making data-driven decisions. This presentation describes an automated data pipeline to help a small veterinary hospital improve customer service and manage their practice more effectively.

Summarizer Improves Reading Speed and Comprehension by Pralad Neupane

Twitter is popular because messages are short and easy to read. What if book pages and news articles could be more like tweets? This presentation introduces Summarizer, a system that extracts and summarizes key points from a text while analyzing sentiment to produce a short gist that improves reading speed and comprehension.

Time is the Secret to Building Wealth by Noah Bledsoe

Retirement is often the last thing on a young individual's mind, but investing early is the key to building wealth and securing a comfortable lifestyle. This presentation explains how to make money work for you by analyzing stocks with data visualization, optimizing your portfolio using the capital asset price model and sharpe ratio, and predicting stock prices with machine learning.

"I'm thrilled with how far we've come in only five years" recalled Dr. Pittges. "Each year we try to make the program a little better. The class of 2021 has made a significant leap over previous classes because of the talent and preparation of this class and help from industry mentors." He added "The biggest factor, however, is contributions from the alumni of our program who now have industry experience. Our fourth graduating class has the benefit of alumni with industry experience that previous classes did not."

Reflecting on his experience, Pralad Neupane stated "I learned a lot from this project with respect to how to create a project, collect data yourself, clean and process it and perform analytics. In other words, this project was not assigned but build by myself." Pralad added "These patterns follow for every DAIM graduate. I am glad that I can find a problem in the real world and solve it using the education and technology I learned from DAIM program."

The five students graduated with their Master of Science degrees during Radford University 2021 Commencement Week ceremonies.

School of Nursing

- **Congratulations to Chris Keller, CSC Director, she received a \$2700 grant from the Roanoke Higher Ed Authority for High Tech Simulation Scenario Programming.**
- **The Virginia Board of Nursing Accreditation Virtual Site Visit is scheduled for June 22-24, 2021.**

Upcoming Events

Event	Location	Date	Time	Sponsors
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