SDS students,

We highly encourage everyone to read through this newsletter in its entirety, as there are many reminders and useful pieces of information regarding Spring 2021 orientation, course changes and added electives and more.

Thank you all for your hard work throughout the fall semester. We hope you enjoyed a well deserved Winter break. Let's push through together, as the end of the fall semester quickly approaches.

As always, please reach out to Josh Hertel or Carly Mahedy if you have any questions.

Important UPDATES
To be eligible for federal financial aid consideration next year, students need to submit a FAFSA for the 2021-2022 academic year. All students need to reapply every year. It is important for students to apply for financial aid by the January 1 priority deadline as the earlier you submit the FAFSA, the earlier you will receive a financial aid offer.

Students are encouraged to schedule a virtual appointment with Niner Central for assistance with completing their FAFSA application.

Complete The Form

Commencement For 2020 Graduates

UNC Charlotte will honor all of our 2020 graduates (May, August and December) with a virtual celebration on Friday, January 8, 2021.

The ceremony pre-show will begin at 5:49 p.m. with the ceremony premiering at 6:00 p.m. Graduates will receive additional ceremony information through their UNC Charlotte email account as it becomes available.
Our graduates have worked hard for their degrees, and for many, this moment is one an entire family has worked toward. While an in-person ceremony is a wonderful tradition, please know that a virtual ceremony does not lessen your accomplishments or this important milestone in your life.

NEW Spring 2021 Electives

Enterprise Health Information Systems - 26667 - HCIP 6392 - 001: Mondays, 5:30 - 8:15 p.m., Main campus/Denny 220; Dr. Yaorong Ge

Prerequisites: None
Target Audience: Any student interested in health-related applications with a CS, IT, or Data Science (DSBA, HIA) background can take this class

Description: Healthcare enterprises generate a significant amount of health-related data every day. They provide one of the main sources of data for practitioners of health informatics and analytics. Therefore, it is critically important that every health informatician has a good understanding of how various information systems in healthcare enterprises work together to support the complex process of patient care while collecting useful healthcare data throughout the process. In this course, we will study (a) the history, evolution, state-of-art, and issues of healthcare information systems; (b) major information systems in a healthcare enterprise and how they are designed, tested, and installed; and (c) the evaluation and adoption of clinical, administrative, and specialty information technology applications for health organizations. Our discussions will center on three specific systems: the electronic health record system (EHR), the picture archiving and communication system (PACS), and the enterprise clinical data warehouse system.

DSBA 6010 001: Special Topics in DSBA; Dr. Mirsad Hadzikadic

Description: This class will provide a gentle introduction to the world of Complex Adaptive Systems to those who are interested in policy development and evaluation. No programming experience is required. Topics in the class include, but are not limited to:

- Systems thinking
- Complex Adaptive Systems
- Simulation and modeling techniques of Complex Adaptive Systems (agent-based modeling, network science, game theory, systems dynamics, chaos theory, fractals,)
- Applicability of Complex Adaptive Systems to Public Policy
- Examples of Public Policy (education, healthcare, urban planning, transportation, public health,)
- Hands on experience (project)

Learn more about the course [here](#).
Description: This class offers a hands-on approach to machine learning and data science. The class discusses how to apply some fundamental methods like decision trees, bayesian classifiers, SVMs, random forests, and some advanced techniques like semi-supervised learning, neural networks, and deep learning on real-world datasets, including data preparation, model selection, and evaluation. We will learn a range of applications like social network analysis, natural language processing, sports analytics, time-series analytics, and automated machine learning. Apart from applying models, we will also discuss software development tools and industry best practices relevant to productionizing machine learning models, particularly how to develop scalable models that can be deployed on a cloud infrastructure. Our class will include guest lectures from data scientists from Bank of America and ESPN. Prior iterations of the class have resulted in successful IEEE research publications as well (read: Extracting Cryptocurrency Price Movements From the Reddit Network Sentiment).

Important: DSBA Course Location Change

The instruction method for the course "Big Data Analytics for Competitive Advantage - 21629 - DSBA 6100 - U01" has been changed to online/asynchronous. As a reminder, the instructor for this course will be Dr. Anu Brookins.

WiDS Worldwide 4th Annual Datathon - Identifying Diabetes Condition to Provide Better Care for ICU Patients

Registration is now open for the WiDS Worldwide's 4th annual datathon challenge! You'll find information on the event below. We highly encourage our
SDS graduate students to participate!

**Event:** The 4th Annual WiDS Datathon Challenge: Identifying Diabetes Condition to Provide Better Care for ICU Patients

**Date:** Early January-February 2021

**Description:** This year’s datathon challenge will focus on models to determine whether a patient admitted to an Intensive Care Unit (ICU) has been diagnosed with a particular type of diabetes.

**How it works:** The datathon will run from early January-February 2021 on Kaggle, an online community of data scientists.

Labeled training and validation sets will be provided for model development; you will then upload your classifications for an unlabeled test set to Kaggle and these will be used to determine the public leaderboard rankings and the winners of the competition.

Winners will be announced at the WiDS Worldwide Conference held virtually on March 8, 2021. Beyond the leaderboard rankings, individuals and teams will also have an opportunity to submit papers about their work to be eligible for an Excellence in Research Award from the National Science Foundation Big Data Innovation Hubs.

**Who can participate:** The datathon is open to individuals or teams of up to 4; at least half of each team must be women (people identifying as female). Participants can be students, faculty, government workers, members of NGOs, or industry members.

Register Here

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**In Case You Missed It:** Wednesday Seminar, Navigating Resumes and Interviews During a Pandemic
Did you miss this Wednesday Seminar?

Head to the SDS Youtube channel to check out the recording, or watch it again if you enjoyed the session!

Don't forget to like and subscribe!

Watch It Again: SDS Wednesday Seminar Series: Resume Critique and Interview Coaching with LendingTree

Did you miss our final Wednesday Seminar of the fall semester?

Head to the SDS Youtube channel to check out the recording, or watch it again if you enjoyed the session!
SDS Director of Research Appointed To UNC Charlotte Strategic Planning Research Committee

SDS Director of Research, Dongsong Zhang, was appointed to the 2021 Strategic Planning Research Committee, on behalf of Chancellor Gaber.

Learn how this diverse committee will develop a roadmap to achieve Carnegie R1 classification.

Introducing The Founders of UNC Charlotte's School of Data Science
UNC Charlotte’s School of Data Science has raised more than $100,000 through the SDS Founding Members Program. With the recent launch of Bachelor’s of Science in Data Science degree, much of the funding will assist students and propel the program forward for years to come.

The SDS Founding Members program received tremendous support from long-time advocates and valued industry partners of the School of Data Science.

[Meet The Founders Here]

[Mark Your Calendar]

COPSS-NISS COVID-19 Data Science Webinar Series: Delphi COVID-19 Symptom and Hospitalization Data
When: December 17, 2020 - noon to 1:00 p.m.

The COPSS-NISS COVID-19 Data Science webinar series is co-organized by the Committee of the Presidents of Statistical Societies (COPSS) and its five charter member societies (ASA, ENAR, IMS, SSC, and WNAR), as well as NISS. This bi-weekly seminar features the latest research that is positioned on the cusp of new understanding and analysis of COVID-19 pandemic data, and promotes data-driven research and decision making to combat COVID-19.

We all know that data is the foundation on which statistical modeling rests. To provide a better foundation for COVID-19 tracking and forecasting, the Delphi group launched an effort called COVIDcast, which has many parts:

- Unique relationships with partners in tech and healthcare granting us access to real-time data on pandemic activity.
- Code and infrastructure to build COVID-19 indicators, continuously-updated and geographically comprehensive.
- A historical database of all indicators, including revision tracking, currently with hundreds of millions of observations.
- A public API serving new indicators daily (and R and Python packages for client support).
- Interactive maps and graphics to display our indicators.
- Forecasting and modeling work building on the indicators.

This talk will summarize the various parts, and highlight some interesting findings so far. They'll also describe ways you can get involved yourself, access the collected data, and leverage the tools they built.

Register Here

SAVE THE DATE: SDS New & Continuing Student Orientation
When: January 19, 2021 - 5:30 PM to 6:30 PM

Join us for our Spring 2021 virtual orientation. Please note: The time has changed to accommodate the orientation held by the Center for Graduate Life.

During this session, students will learn about how to prepare for the first semester, class expectations and other aspects of each program.

Find the zoom session information below:

Join Zoom Meeting  
https://uncc.zoom.us/j/98206248063

Meeting ID: 982 0624 8063

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Data Science Alumni Panel

When: January 26, 2021 - Noon to 1:00 PM

Join SDS and the Career Center for a lunchtime panel with UNC Charlotte alumni working in data science roles. Learn about a day in the life of a data scientist and gain insight into this hot industry. Come prepared to ask questions and engage our panel of experts in conversation!

Learn More and Register Here
Summer 2021 Internship Opportunity: Roche

Roche is accepting applications for a Systems Program Office Internship for Summer 2021. Deadline to apply is Friday, December 18th. Please note: this position has the opportunity to be remote.

Roche is looking for bright individuals who are ready for an exciting experience in the medical Device Industry. All candidates will apply through the system and our recruiters will evaluate them before the hiring manager.

Apply Here

The New York Times: Summer 2021- Data Science Intern

The New York Times is seeking inventive and motivated interns to join the Data Science group. In this role, you will reframe newsroom and business objectives as machine learning tasks that can deliver actionable insights, accurate predictions, and effective optimization.
About our Team

We implement and execute machine learning research with reliability and reproducibility. We communicate results and impact to newsroom and business stakeholders. Our group turns models into data products, collaborating with engineering teams, and integrates these into process throughout The Times.

As a data science intern, you will:

- Develop and deploy machine learning solutions to newsroom and business problems;
- Work with Python, scikit-learn, and Google Cloud Platform; and
- Communicate the results of your analyses to other members of the organization in a clear and concise fashion.

About You

You have experience in computer science, applied mathematics, or other quantitative or computational discipline. You have experience with open source machine learning or statistical analysis tools. Familiarity with experimental design is a plus. You have coding experience, Python preferred. You have demonstrated the ability to communicate complex ideas in data science to relevant stakeholders. You share our commitment to The Times' mission of delivering the world’s best and most reliable journalism. You are eager to collaborate with both technical and non-technical colleagues in editorial, product management, marketing, and executive leadership groups. You share our desire to join the world’s most important journalism company at a moment in history when the importance of learning from our data is transforming every aspect of the craft and practice of journalism.

Apply Here

Press Ganey - Research Analyst

**Interested candidates should apply through the link below and mention Joshua Hertel and the School of Data Science under "How they heard about the position. The company's HR department will be on the lookout for SDS applicants.**

Applicants must be a US citizen or have authorization to work in the US.

About Press Ganey

Press Ganey pioneered the health care performance improvement movement
more than 30 years ago. Today, Press Ganey offers an integrated suite of solutions that enable enterprise transformation across the patient journey. Delivered through a cutting-edge digital platform built on a foundation of data security, Press Ganey solutions address safety, clinical excellence, patient experience and workforce engagement. The company works with more than 33,000 health care facilities in its mission to reduce patient suffering and enhance caregiver resilience to improve the overall safety, quality and experience of care.

Position Description:

The Research Analyst will assist in the governance of specific Press Ganey product lines and the design and execution of strategic research projects. The person will manage data quality across products.

Minimum Education and Experience:

MA or MS preferred in statistics, data science, social science or healthcare related field with a strong quantitative background

Learn More and Apply Here

Fellowship Opportunities - ORISE at the CDC

About the Program

The Centers for Disease Control and Prevention (CDC) Research Participation Program is managed by the Oak Ridge Institute for Science and Education (ORISE) under an agreement between the CDC and the U.S. Department of Energy (DOE). The CDC collaborates to create the expertise, information, and tools that people and communities need to protect their health – through health promotion; prevention of disease, injury and disability; and preparedness for new health threats. The CDC ORISE programs are considered a valuable human capital and workforce development tool, which provide educational experiences and training in public health as a means to introduce highly motivated participants to potential public health careers.

Fellowship Opportunities:

- **CDC Data Analysis Fellowship NEW!**
  CDC | Atlanta, GA | Full-Time | **DEADLINE:** January 4, 2021

- **Public Health Data Analysis Fellowship**
  CDC | Atlanta, GA | Full-Time | **DEADLINE:** January 7, 2021

- **CDC Data Evaluation Fellowship NEW!**
  CDC | Atlanta, GA | Full-Time | **DEADLINE:** January 8, 2021

- **Waterborne Environmental Microbiology and Engineering Laboratory Fellowship**
  CDC | Atlanta, GA | Full-Time | **DEADLINE:** January 11, 2021
- **Air Pollution & COVID-19 Epidemiology Analysis Fellowship**
  CDC | Atlanta, GA | Full-Time | **DEADLINE: January 12, 2021**

- **CDC Environmental Public Health Tracking Fellowship**
  CDC | Atlanta, GA | Full-Time | **DEADLINE: January 15, 2021**

- **CDC Bioinformatics Fellowship NEW!**
  CDC | Atlanta, GA | Full-Time | **DEADLINE: January 29, 2021**

- **CDC Policy Fellowship NEW!**
  CDC | Atlanta, GA | Full-Time | **DEADLINE: January 29, 2021**

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**SDS Hire-A-Niner page**

[Link to SDS Hire-A-Niner page]

[Join the Facebook Group]