CHARLOTTE
SCHOOL OF DATA SCIENCE

FACULTY
NEWSLETTER

Well, we made it through Summer I and the second half has started. A few things to celebrate: first the PhD Preliminary Authorization was approved by the UNC System. It is being reviewed by the System Graduate Council on July 7th. Progress! Second, two Ignite center proposals that SDS signed letters of support for were "partially" funded Center for Geospatial Sensing and Analytics (GeoSAN) led by Wenwu Tang, and Charlotte Center for Trustworthy AI for Model Risk Management (TAIM2) led by Taufiquar Khan. Many SDS faculty were involved in other centers that were awarded full or partial support. Congrats to all involved in these proposals.

I know many of you are hard at work on your research including the SDS Seed grants we awarded earlier this year. As you write proposals, please remember to add **SDS as a Center** when appropriate. Previous awards that have clicked this have resulted in our first F&A funds within SDS. So as you need small amounts of support for your research, go ahead and ask me for funding. The SDS Seed grants are our primary method to support research, but now that we have F&A funds within SDS, this has expanded the funding for supporting faculty. Just FYI, priority will go to those whose research has contributed to the fund, but it will not be used exclusively for those researchers.

FYI: I will be headed out on vacation from July 15th to August 5th. This is the longest I've ever taken for a vacation. I'll be traveling through the southern/southwestern US and stopping to celebrate my father's life in some of his favorite mountains of Colorado. I'll have my phone and computer so I will be periodically monitoring things and can respond to critical issues.

Best regards,

Doug

SDS Appoints Dr. Shannon Reid and Dr. Marco Scipioni as Undergraduate Program Co-Directors

The School of Data Science (SDS) is excited to announce the appointment of **Dr. Shannon Reid** and **Dr. Marco Scipioni** as Undergraduate Program Co-Directors. In their new roles, they will be instrumental in shaping the governance, curriculum, student recruitment, and student success for SDS's undergraduate programs. Dr. Reid will oversee curriculum and governance, while Dr. Scipioni will focus on student success, including recruitment and retention.

As the Undergraduate Program Director for Curriculum and Governance, Dr. Reid will primarily be responsible for curriculum development and governance. She will chair the SDS Undergraduate Curriculum Committee. In addition, she will lead the review of new and existing courses to ensure they align with program goals/SLOs and provide recommendations for improvement.

As the Undergraduate Program Director for Student Engagement and Advising, Dr. Scipioni will concentrate on student recruitment, advising, and retention. He will collaborate with the SDS advisors to engage with prospective students, building out the onboarding and advising process for new and continuing students. In addition, he will coordinate advising for Transfer students, regarding placement and credit, course substitutions, academic petitions, and academic appeals.

Dr. Scipioni and Reid take over the position formerly held by**Dr. Angela Berardinelli**. Angela was the founding Program Director for the undergraduate degree in Data Science. She led the efforts to launch the degree. Her creativity and hard work were instrumental in the early and ongoing success of the program. On behalf of the students and School, we extend our sincerest thanks to Dr. Berardinelli.

New Resources for DataCamp & the SDS Bootcamps

Based on faculty feedback the current Python and R bootcamps are scheduled to be discontinued at the Summer 2023 session. After review of the available resources in **DataCamp** the conclusion was that the modules available through the platform were superior. We are now excited to announce the availability of two custom tracks, SDS R Bootcamp and SDS Python Bootcamp, on DataCamp. Upon completion of each bootcamp, students receive a statement of accomplishment to demonstrate their readiness for your courses. We encourage you to consider integrating these bootcamps into your curriculum as course requirements or recommended resources to ensure students possess foundational programming skills. For further information, please contact Sonali Choudhary at schoudh5@charlotte.edu. The SDS team is also in the process of updating resources for students and faculty on the respective program websites (**HIA, DSBA, BSDS**). This is an ongoing project over the summer, and your feedback is welcome.   Please email **Joshua Hertel** to share questions or comments.

AIM-AHEAD Call for Proposals

AIM-AHEAD (Artificial Intelligence/Machine Learning Consortium to Advance Health Equity and Researcher Diversity) has released information about new funding opportunities! The AIM-AHEAD program has established mutually beneficial, coordinated, and trusted partnerships to enhance the participation and representation of researchers and communities currently underrepresented in the development of AI/ML models and to improve the capabilities of this emerging technology, beginning with electronic health records (EHR) and extending to other diverse data to address health disparities and inequities. Please view their **Call For Proposals.** There are multiple proposal categories with related webinars on various dates.

MARK YOUR CALENDAR

"Data Science for Social Good": guest lecture by Dr. Ponnurangam Kumaraguru ("PK")

Monday, July 17 at 2:30pm in Woodward 236

Dr. PK (Professor of Computer Science at **IIIT-Hyderabad**) will touch upon the following: analysis of lower court cases; bail prediction using court documents; biases in the data, algorithms, and some instances where we have measured the biases; analyzing social media data for drug consumption, including data from Reddit; and analyzing Spotify data to measure depression among listeners, linking online and offline behavior of users.
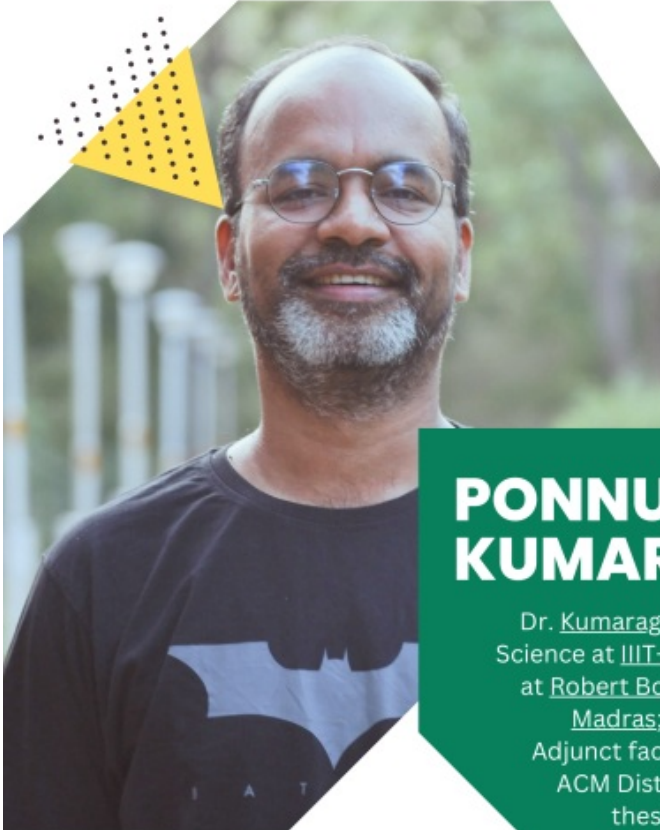
Many of our research work is made available for public use through tools or online services at **https://precog.iiit.ac.in/** including datasets that we have used in our research work. Our work derives techniques from Computational Social Science, Data Science, Statistics, and Network Science.

PK is an Associate Researcher at **Robert Bosch Centre for Data Science & AI - IIT Madras,** visiting faculty at **IIT Kanpur**, and an Adjunct faculty at **IIIT Delhi**.

Human-Centered Computing Lab presents:

Data Science for Social Good

📅 JULY 17, 2023

2:30 PM
WD 236

PONNURANGAM KUMARAGURU ('PK')

Dr. Kumaraguru ("PK") is a Professor of Computer Science at IIIT-Hyderabad; an Associate Researcher at Robert Bosch Centre for Data Science & AI - IIT Madras; Visiting Faculty at IIT Kanpur; and an Adjunct faculty at IIIT Delhi. PK was inducted an ACM Distinguished Member in 2021. His Ph.D. thesis work at Carnegie Mellon University contributed in creating an award-winning startup - Wombat Security Technologies, wombatsecurity.com. Wombat was acquired in March 2018 for $225M.

All work presented in the talk (including datasets, code, slides, recorded videos) has related publications available at https://precog.iiit.ac.in/

LEARN MORE ABOUT PK

Call for Abstracts: NC HIMSS Annual Conference due July 10

The NC HIMSS annual conference will be held October 2-3, 2023, at the Raleigh Marriott Crabtree. The conference objective is to enhance professional knowledge, create forums for networking, and foster leadership at the individual and corporate level. If you would like to share something exciting about what you are doing in healthcare information technology, please respond

to this call for presenters by July 10, 2023.

SUBMIT ABSTRACT

SESUG 2023: Academic & Professional Grants Available: Applications due July 11

The SouthEast SAS® Users Group has a number of academic and professional grants still available for this year's conference in Charlotte, NC! Grant recipients receive: reduced conference registration, free pre-conference tutorial, a reduced room rate, and a stipend for travel costs. Grant recipients will present a paper (**proposals are due June 16th**) and complete at least one volunteer shift. **Grant applications are due July 11th.**

MORE INFO

Symposium: Unveiling AI and Machine Learning: Critical thinking discourses in mathematics education

July 24, 9am - 10:30am: In person and virtual

Symposium

Unveiling AI and Machine Learning:
Critical thinking discourses in mathematics education

Christian Andersson
Malmö University, Sweden

ABSTRACT

AI and machine learning are becoming increasingly important technologies in society. In the context of the internet, most of us experience daily, the output of predictive algorithms that take our digital footprints as data. However, mathematical models are not necessarily objective or politically neutral, as model assumptions may portray stereotypes, and algorithmic bias may operate as oppression for unprivileged groups in society. The topic of this dissertation project aims to investigate what discourses are enacted when mathematics education begins to encompass critical thinking on societal perspectives in relation to online algorithms. Tentative results will be presented.

DATE: Monday, July 24th
TIME: 9:00 AM - 10:30 AM
LOCATION: COED 321C and Zoom

RSVP via this link

REGISTER NOW!

Important Dates

Find the full **SDS Calendar of Events** on the program website

- **August 8, 2023:** Last Day of Classes
- **August 21, 2023**: First Day of Classes - Fall Semester

SCHOOL OF DATA SCIENCE

FACULTY RESOURCES

Teaching Assistant (TA) Training

The **Center for Teaching and Learning (CTL)** has shared a list of resources for faculty and new graduate teaching assistants. Many of the trainings are

virtual. The list below was compiled and shared by Kiran Budhrani - Director, Teaching and Learning Innovation.

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MORE INFO

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SMART-DART: Health, Science & Social Equity Cohort

Applications close July 15

The South Big Data Hub will join CODATA-RDA, the AIM-AHEAD Southeast Hub at Morehouse School of Medicine, and Microsoft to host a 10-week Researcher Data Science Training through a mix of virtual and in-person instruction. This will be the second CODATA-RDA School run in the United States and research teams from universities with the AIM-AHEAD Southeast Hub, the South Hub DataUp program and their expanded network would be invited to apply. The SMART-DART: Equity Cohort will focus on growing the competence of Health, Climate, and Social Equity researchers in accessing, analyzing, visualizing, and publishing data. It is open to participants from minority-serving institutions (MSIs). This activity will cover topics on principles and practice of Open Science, research data management and curation, use of a range of research compute infrastructures, large-scale analysis, statistics, visualization and modeling techniques, automation and scripting.

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LEARN MORE

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Selected news from *South Big Data Hub*:

The South Big Data Innovation Hub is managed jointly by the Georgia Institute of Technology and the University of North Carolina at Chapel Hill, the South Hub provides critical infrastructure for the transition of Big Data to Benefits— with more than 1300+ members from universities, corporations, foundations, and cities committing their support. See the full newsletter **here.**

SEEDS Program Applications close September 1	**Biden-Harris Administration Announces New NIST Public Working Group on AI: Interest form due July 9**
The South Big Data Innovation Hub SEEDS (Southern Engagement and Enrichment in Data Science) program is designed to promote collaboration and support the cross-pollination of tools, data, and ideas across disciplines	U.S. Secretary of Commerce Gina Raimondo announced that the National Institute of Standards and Technology (NIST) is launching a new public working group on Artificial

and sectors including academia, industry, government, and communities. Seed grant awards must support the southern region and the Major Goals and Priority Areas of the South Hub. Eligible applicants include individuals or group teams led by faculty, students, or individuals from academic institutions or other non-profits within the Southern United States- defined as Delaware – Texas, including the District of Columbia. Apply for SEEDS awards of $10,000, $50,000, or $100,000. **Learn more on our website.**

Intelligence (AI) that will build on the success of the NIST AI Risk Management Framework (RMF) to address this rapidly advancing technology. The Public Working Group on Generative AI will help address the opportunities and challenges associated with AI that can generate content, such as code, text, images, videos and music. **Learn more on their website.**

Human Networks and Data Science - Infrastructure (HNDS-I) Proposals due August 3

The Human Networks and Data Science program (HNDS) supports research that enhances understanding of human behavior by leveraging data and network science research across a broad range of topics. HNDS research will identify ways in which dynamic, distributed, or heterogeneous data can provide novel answers to fundamental questions about individual or group behavior. HNDS is especially interested in proposals that provide data-rich insights about human networks to support improved health, prosperity, and security. Infrastructure proposals will address the development of data resources and relevant analytic techniques that support fundamental Social, Behavioral and Economic (SBE) research. Successful infrastructure proposals will construct, within the financial resources provided by the award, databases or relevant analytic techniques and produce a finished product that will enable previously impossible data-intensive research in the social sciences. The databases or techniques should have significant impacts, either across multiple fields or within broad disciplinary areas, by making possible new types of data-intensive research in the SBE sciences. **Learn more on their website.**

Student
RESOURCES

Fall Orientation & Town Hall for all DSBA & HIAN (On Campus)

School of Data Science will host an in-person Orientation for new and continuing graduate students on Saturday, August 19, 2023, from 11:00 am - 12:30 pm. It will be held on the main campus in the Student Union building room 200. Please save the date and plan to attend.

RSVP

HIA ONLINE/DE Certificate Orientation

The SDS will also host a *virtual orientation* for our fully online / distance education students in the Health Informatics Certificate program on Friday, August 18, 2023, from 12:00 noon - 1:00 pm.

RSVP

Data Matters: Data Science Short Course Series

August 7 - 11th, Virtual

Data Matters™ is a week-long series of one and two-day courses aimed at students and professionals in business, research, and government. The short course series gives students the chance to learn about a wide range of topics in data science, analytics, visualization, curation, and more from expert instructors.

REGISTER TODAY!

University of North Carolina at Charlotte | 9105 University Rd, Charlotte, NC 28223