The Sentinel: January 19, 2022
News and events happening in the Computer Science Department

CS Tea Talk:

Tea Talks take place on Thursdays 4:00-5:00 in Olin 306. Hear from compelling speakers and have fun with other people interested in CS.
(Note: Masking is required at CS Tea events, as these events are open to off-campus visitors.)

January 20: **Wendy Ju** **The Car is a Vehicle for Understanding Interaction at Scale**
Abstract: In much of the human world, cars are a part of everyday life. While many researchers study people in cars to understand driving performance, or, more recently, trust or supervisory control of automation, the car can also be a way for better understanding a wider array of human-machine interaction issues. Cars are relatively easy to come by, easy to instrument, and enable relatively simple collection of longitudinal data across a diverse population of participants.

In my research group, we use the car to better understand human interaction at scale. For example, we address interruption, error recognition and recovery and multi-party interaction by using the car as an on-road laboratory to develop generalizable understandings of task, communication and social context. Additionally, we use driving simulation as a way to explore contingent interaction between multiple parties, and to explore how those interaction patterns differ across different geographical contexts. Most recently, during the COVID-19 pandemic, we have been using the car to gather large datasets of public activity, to better understand differences and patterns for example in social-distancing behavior. In this talk, I will survey my lab's research activity and detail novel methods we are developing to tackle the challenge of understanding interaction at large.
Wendy will be speaking remotely, but for those who are able to attend in person we will be gathering in Olin 310 as a single audience (and managing the Q&A live from the room). There is a Zoom option for those unable to attend in person, detailed in the official event listing.

January 27: **CS Tea: Summer 2022 Research Projects** – additional information coming soon.

February 3: Algorithm Bound: Promethean Thoughts about the Fourth Industrial Revolution. Humanities and Technology presented by Patricia Williams. This event is sponsored by the Humanities Center, Computer Science Department, and The Andrew W. Mellon Foundation.

ON-CAMPUS OPPORTUNITIES:

The Perception Lab Do you have an interest in cognitive psychology, linguistics, and/or perception? Are you looking for research experience and perhaps authorship on a poster/article to strengthen your graduate school applications?
The Perception Lab is looking for student researchers to join our team!
We will be conducting research on the cognitive processes supporting speech perception in difficult listening conditions and the mechanisms underlying audiovisual integration (see our research page for more information).
The Perception Lab is also committed to open science practices, so lab time will also be devoted to discussing and learning about topics in meta-science.
Research students will read and become familiar with the literature on these topics, attend weekly lab meetings to discuss research, run participants, assist with data analysis and interpretation, and prepare posters for academic conferences or manuscripts. **Research students enroll in 2 credits of Psych 300 with an expectation of 6-8 hours of work per week (3-4 hours per credit).** Scheduling in the lab is quite flexible; timing for lab meetings and other commitments are determined based on mutual availability. If you are a highly motivated first year, sophomore, or junior with a background (or interest) in psychology, cognitive science, linguistics, or computer science and can make at least a two-term commitment to working in the lab, please fill out the form below. **The lab is committed to diversity in all forms, so students from groups that have been historically excluded from science are particularly encouraged to apply.** The deadline to submit applications is **5pm on January 28, 2022.** If you have any questions, feel free to contact Julia Strand or any of the current research students.
Submit an application here!

OFF-CAMPUS OPPORTUNITIES:

Research Experience for Undergraduates (REU):
Data Science Across Disciplines 2022 Summer REU Program hosted by Marquette University – Department of Computer Science. We are seeking motivated undergraduate students of all levels majoring in data science, computer science, statistics and mathematics. Application deadline is February 13.
Research themes/projects from different areas in data science such as core data science, exercise science, healthcare, social science and spatial analytics.
3-day mini boot camp on introduction to data science (first week of the program).
Mentoring by researchers at Marquette University, Milwaukee, WI.
Professional and leadership development opportunities.
Poster presentation, technical report and publication opportunities.
REU students will receive:
- A stipend of $600 per week ($6,000 for 10 weeks)
- Allowance for food
- Allowance for professional conference registration and travel
- Housing on campus at Marquette
Applicants must:

- Be a United States Citizen or permanent resident,
- Be unemployed for the ten weeks of the program, or on leave / not actively working, and
- Be an undergraduate student in good standing in a major related to data science, computer science, statistics, or mathematics.

Women and students from underrepresented groups, as well as students from institutions with little or no opportunity for undergraduate research are encouraged to apply.   Program details available at **https://reu.cs.mu.edu/** [**Applications**](#) **will be reviewed starting January 31. Deadline is February 13.**

NSF '22 Summer Research Experience for Undergraduates (REU) at Montana State University, Bozeman "Research Experience in Cybersecurity Algorithms"
Students will gain research experience and improve communication and collaborative skills. We aim to provide students with the opportunity to develop a research question and experience writing for academic publications and presentations. **Application Deadline: March 2.** Check this link for details and application: http://www.bobcatsoftwarefactory.com/nsf-reu-2022 For more information, students are welcome to contact: Dr. Clemente Izurieta, Program Director, clemente.izurieta@montana.edu.

NSF Undergraduate Research (REU) Opportunity at Florida Atlantic University – Summer 22: [The Institute for Sensing and Embedded Network Systems Engineering](#) (I-Sense) hosts an intensive summer research program in sensing and smart systems. This nine-week program emphasizes training, mentoring and research, preparing students for graduate studies or careers in STEM disciplines. [**Application**](#) **closes March 8, 2022.**

Part-Time Position Available with the Category Management team at Kellogg Company, supporting Target Kellogg's:
This is a temporary support position working closely with the people and processes that ensure Kellogg's delivers the highest quality food to Target. "We're looking for someone who has a passion for analytics – we want to bring out the tiger in you!"
- 20-25 hours week, flexible around school schedule
- Opportunity for full time during summer break and upon graduation
- Located in Minneapolis area, although we are currently remote
- Interested in analyzing data and recommending actions
- Team player and ready to help "wear many hats" to drive results

Click [here](#) for additional information.

Oregon State University REU: "Robots in the Real World"
10-week ["Robots in the Real World"](#) summer Research Experiences for Undergraduates Site, which has been running for eight years, most recently supported by the National Science Foundation under award CNS 1950927. This year's program will run from June 20 to August 26, 2022, on the main OSU campus in Corvallis, OR. Areas of robotics research for students with backgrounds in computer science, mechanical engineering, electrical engineering, mathematics, physics, social science, or

any closely related fields. The specific projects for 2022 are listed on the project page. **The application form will close February 9, 2022, at 11:59pm.**

Bruins-In-Genomics (B.I.G.) Summer Program: Do you have a passion for Computing, Biology, Math, and Science? Bruins-In-Genomics (B.I.G.) Summer Research Program is an 8-week full time immersion program (June 20-August 12) for undergraduates interested in learning how to read and analyze genes and genomes. Through this program students will have the opportunity to experience graduate-level coursework, and learn the latest cutting-edge research, tools and materials used by leading scientists to solve real-world problems. Rolling admissions: First application deadline for early review is January 3, 2022, 5:00pm PST, **(final deadline March 1).** Click here to apply to Big Summer 2022.

Distributed Research Experience for Undergraduates (DREU)
Are you an undergraduate student interested in exploring research in computer science? DREU interns have the opportunity to be directly involved in a research project and interact with graduate students and professors on a daily basis. This experience is invaluable for those who are considering graduate school; DREU will provide a close-up view of what graduate school is really like and increase interns' competitiveness as an applicant for graduate admissions and fellowships. **Applications are being accepted now through February 15.**

Carleton Career Center Postings:
- Web Developer at Harvard Medical School – posting available through Handshake
- Internships at Pixar – Summer 2022. Application Deadline is February 13
- Associate Technical Writer (undergrad intern) with Visa: Carleton alum, Alex Hoover '90 (AHoover@visa.com) is seeking CS majors. Check this link for job description, qualifications, and application.

Calendar of Upcoming Events:
Jan 20: CS Tea 4pm, Olin 310 and via Zoom (see link posted above)
Jan 20: CS Tea 4pm, Olin 310

Want to receive this newsletter and other CS updates? Sign up for the cs-interest mailing list by contacting Paula Stowe.