The Sentinel: February 8, 2021
News and events happening in the Computer Science Department

CS Tea – Upcoming Tea Talks:
Tea Talks will continue to take place via Zoom during Winter Term. To receive the zoom link signup for the **cs-interest mailingslist** then join us **via Zoom 4:00-4:45pm**. Watch for emails from Professor Rafferty highlighting details about our talks; also check for postings on the CS department website.

Feb. 11 Tea Talk: Dr. Patricia Garcia (https://patriciagarcia.info/ ; University of Michigan) Expressive Electronics: Broadening Participation in Computing Through Identity Exploration
The continued underrepresentation of women of color in computing necessitates innovative strategies for diversifying entry points to computing knowledge and skills. Drawing on results from a study implemented in public libraries, this talk will highlight a collaborative project aimed at promoting computational thinking skills among girls of color through the use of identity exploration and creative circuitry. The talk will contribute to a discussion on how to address gender and racial inequities in computing through informal learning experiences that center student experiences and leverage diverse student identities as assets in learning spaces.

Patricia Garcia is an Assistant Professor in the School of Information at the University of Michigan. She conducts interdisciplinary action research on the complex interplay between race, gender, and technology. Her current work focuses on broadening participation in computing by developing a culturally responsive and low-resource model for teaching computational thinking skills in informal learning environments such as public libraries and community centers.

Feb. 18 Tea Talk: Prospective majors event
Mar. 4: Tea Talk: Dr. Siobahn Day Grady (https://siobahncday.com/, Professor of Information Systems at North Carolina Central University

Summer research opportunities in the CS department:
There are four projects, advised by three faculty members, where student help is being sought this summer:

- **Decoding tech support: Expertise identification and trust negotiation of help-seekers and help-givers** (Amy Csizmar Dalal)
- **Investigating Communication and Modeling Microbiome Evolution** (Anya Vostinar)

(next page)

- **Rearchitecting Dragon Architect** (Aaron Bauer)
- **Understanding Attention, Information Gathering, and Expertise in Starcraft 2** (Aaron Bauer)

You can read more about each of these projects here. There's a link to the application here, which is **due by 5pm on Monday, February 15**. Summer positions are full time and pay $480 per week.

The Match: Check your email for information from Professor Anna Rafferty regarding registering for Spring Term courses using The Match. Your course selections are due by Noon on Thursday, February 11.

From the Computer Science Department: **Announcing the International Collegiate Programming Contest (ICPC)**
On February 27, Carleton will compete* in a regional qualifier for the International Collegiate Programming Contest (ICPC), and we need you to join our team! From the contest web page: The International Collegiate Programming Contest is an algorithmic programming contest for college students. Teams of three, representing their university, work to solve the most real-world problems, fostering collaboration, creativity, innovation, and the ability to perform under pressure. Through training and competition, teams challenge each other to raise the bar on the possible. Quite simply, it is the oldest, largest, and most prestigious programming contest in the world. The winning team from the regional contest will progress to the international competition and compete against teams from around the world. Contact Aaron Bauer by email and you'll be added to the list of people who will get future ICPC emails.

CARLETON OPPORTUNITIES:

Kolenkow-Reitz Fellowship Information Session for Students
Tuesday, February 9, 12:25-1:25pm via Zoom
The Kolenkow-Reitz fellowship provides research support for Carleton students working with non-Carleton science and math faculty at another institution during the summer. These research opportunities are intended to encourage Carleton students' development as scientists and their exploration of mathematics and the sciences as a possible career, and are appropriate for students at any stage of their STEM exploration! At this information session, we'll demystify what the fellowship is all about, how to find opportunities, how advisors and trusted faculty members can help students find opportunities, and what the application process looks like.
Zoom information
https://carleton.zoom.us/j/97403697921?pwd=V2dHOUtBb24rNExyZ1MzSWZNS0xqUT09
Meeting ID: 974 0369 7921
Passcode: 792963
Questions? Contact Amy Csizmar Dalal (adalal) or Stephanie Schroeder (sschroeder)

(next page)

From the Psychology Department: Join 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 February 19th, 2021. If you have any questions, feel free to contact Julia Strand or any of the current research students.
Submit an application here!

Career Center Events/Opportunities:

Data Science Summer Intern at Proofpoint – Undergraduate
Do you have a passion for applying analytical reasoning to real-world problems? Do you have a strong mathematical background and understand ML fundamentals? Are you fascinated by the deep learning advancements in GANs, CNNs, RNNs, Transformers, and RL but also are excited about classic approaches such as SVM and Random Forest? If so, then Proofpoint's ML Labs team is looking for a Data Science Summer Intern like you!
NOTE: **Apply ASAP but absolutely no later than February 8, 2021** to ensure you get considered. Phone interviews the week of February 15 and full interviews the weeks of February 22 and March 1.
This opportunity is brought to us by a Carleton alum, Ryan Skinner '13. You are highly encouraged to reach out to Ryan via LinkedIn with any questions regarding the organization or the position prior to applying.

(next page)

OTHER OPPORTUNITIES:

UNC Charlotte – College of Computing and Informatics – Summer 2021 Undergraduate Research Experiences
This REU will be structured as a distributed experience - students will not come to the Charlotte campus, but instead will engage in regular research and REU community activities in a remote/online format. Applications for Summer 2021 are open. Early application deadline is March 1.

NSF BIT SURE Research Experience for Undergraduates (REU)
Summer 2021. Hosted by North Carolina State University, this 10-week program focuses on *advanced sequencing tools* that are transforming the way biologists conduct research and inclusive science. Participants learn about sequencing techniques and participate in professional development opportunities and site visits. A series of workshops and service-learning opportunities promote diversity in science and learning. **BIT SURE** participants receive a stipend.
The **application** is available on our website: **go.ncsu.edu/BITSURE**
The deadline is **February 14th, 2020.**

Paglia Post-Bac Research Fellowship for Graduating Seniors:
Applications are now open for the Paglia Post-Bac Research Fellowship, intended to support graduating seniors with a strong interest in a career in scientific research as they experience working life in a lab/research group at a U.S. Research One (R1) institution for a period of one year (for international students) or two years (for US citizens or permanent residents). Graduating seniors with a major in a discipline represented on Carleton's STEM Board (Biology, Chemistry, Cognitive Science, Computer Science, Environmental Studies, Geology, Mathematics and Statistics, Physics and Astronomy, and Psychology) are eligible to apply. Find out more about the expectations, eligibility requirements, and application process. Application deadline is 5 PM on Friday, February 26, 2021.

The National Science Foundation recently announced the CISE Graduate Fellowships (CSGrad4US) program which provides an opportunity for bachelor's degree holders to return to academia and pursue research-based doctoral degrees. The fellowship will provide 3-year fellowship opportunities for new Ph.D. students in the computing disciplines.
This program applies to alumni who graduated with a bachelor's degree between July 1, 2016, and June 31, 2019
Eligibility
CSGrad4US Fellowship applicants must meet the following eligibility criteria:
- Be a U.S. citizen, national, or permanent resident;
- Intend to apply for full-time enrollment in a research-based doctoral degree program in a CISE field (computer science, computer engineering, or information science) no later than Fall 2023;

(next page)

- o Have graduated with a bachelor's degree in a CISE field between July 1, 2016, and June 31, 2019;
- o Not be enrolled in a master's or doctoral degree-granting program for a CISE discipline at the time of the application (other than a professional master's degree program); and
- o Have never previously accepted a NSF Graduate Research Fellowship.

Read more here.

Reminder - Important Dates

Feb 9:   Kolenkow-Reitz Fellowship Research Information Session
Feb 11:   The Match course selections for Spring Term due at noon
Feb 11:   CS Tea -- Dr. Patricia Garcia
Feb 14:   Valentine's Day
Feb 15-23: Advising Days
Feb 18:   CS Tea – Prospective Majors Event