

# Wednesday Aug 23 (Day 1)

Golisano Hall/GCI CYB 70-2780

9:00 - 9:30 a.m.

Introductions CRT-NRT trainees and breakfast

9:30 - 11:30 a.m.

Session I

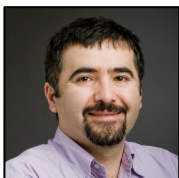


*Orientation by NRT Director*

Dr. Cecilia Alm, PI and AWARE-AI Director

11:30 - 12:00 p.m.

Session II



*Internships overview and completion of internships form (bring CV and cover letter)*

Dr. Ferat Sahin, Co-PI

12:00 - 12:45 p.m.

Lunch with interactive recap of key orientation points with Dr. Alm

12:45 - 2:00 p.m.

NRT faculty's lab overview + lab resources talks

2:00 - 2:30 p.m.

Session III



*Lab rotations overview and completion of lab rotations form*

Dr. Alex Ororbia, Co-PI; Dr. Cecilia Alm, PI

# 2023 AWARE-AI ONBOARDING

awareainrt@rit.edu



# RIT

## AWARE-AI NSF Research Traineeship Program

2:30 - 3:45 p.m.

Research to Mentoring Bridge: AI Software



Dr. Bailey



Dr. Ororbia



Dr. Alm



Dr. Baheri

3:45 - 4:00 p.m.

Networking coffee mingle in **CYB-1710-1730**

4:00 - 5:00 p.m.

Session IV

**Senior Scientist Plenary Talk in CYB-1710-30  
Global Cybersecurity Center**

*Using Large Language Models  
to Build Explainable Classifiers*

Dr. Chris Callison-Burch  
Associate Professor  
University of Pennsylvania  
AI2 Research Sabbatical  
Introduced by Dr. Cecilia Alm



This material is based upon work supported by the National Science Foundation under Award No. DGE-2125362. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

## Using Large Language Models to Build Explainable Classifiers

Wednesday August 23  
at 4:00 p.m. ET  
in CYB 070 1710-1730

Chris Callison-Burch  
University of Pennsylvania  
Philadelphia, PA, USA  
[ccb@upenn.edu](mailto:ccb@upenn.edu)



**ABSTRACT:** This presentation discusses research on using large language models (LLMs) to build explainable classifiers. It will show off work from my PhD students and collaborators on several recent research directions:

- Image classification with explainable features ([arxiv.org/abs/2211.11158](https://arxiv.org/abs/2211.11158))
- Text classification with explainable features (work in progress)
- The importance of faithfulness in explanations ([arxiv.org/abs/2209.11326](https://arxiv.org/abs/2209.11326))
- A faithful "chain of thought" LLM reasoner that produces code in its explanations ([arxiv.org/abs/2301.13379](https://arxiv.org/abs/2301.13379))

The talk will cover joint work with: Adam Stein, Ajay Patel, Ansh Kothary, Artemis Panagopoulou, Daniel Jin, Delip Rao, Eric Wong, Harry Li Zhang, Kathleen McKeown, Marianna Apidianaki, Mark Yatskar, Shenghao Zhou, Shreya Havaldar, Veronica Qing Lyu, Yue Yang, and others.

**BIO:** Chris Callison-Burch is an associate professor of Computer and Information Science at the University of Pennsylvania. His course on Artificial Intelligence has one of the highest enrollments at the university with 500 students taking the class each Fall. He is best known for his research into statistical machine translation, paraphrasing and crowdsourcing. His current research is focused on applications of large language models to long-standing challenge problems in artificial intelligence. His PhD students joke that now whenever they ask him anything his first response is "Have you tried GPT for that?" Prof Callison-Burch has more than 100 publications, which have been cited over 20,000 times. He is a Sloan Research Fellow, and he has received faculty research awards from Google, Microsoft, Amazon, Facebook, and Roblox, in addition to funding from DARPA, IARPA, and the NSF.

## Providing Privacy for Eye-Tracking Data with Applications in XR

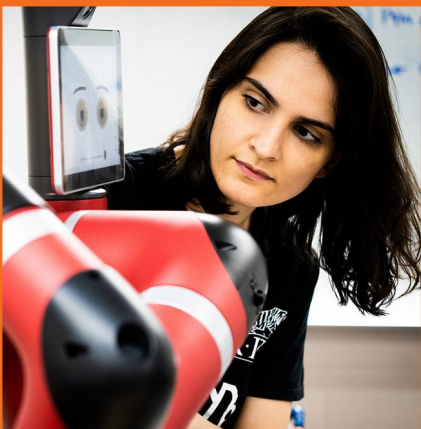
**Thursday August 24 at  
11:00 a.m. ET  
in CYB 070-1750**

**Brendan David-John**  
Virginia Tech  
Blacksburg, VA, USA  
[bmdj@cs.vt.edu](mailto:bmdj@cs.vt.edu)



**ABSTRACT:** Eye-tracking sensors track where a user looks and are being increasingly integrated into mixed-reality devices. Although critical interactions are being enabled via ML models on sensor data, there are significant possibilities for violating user security and privacy expectations. There are appreciable privacy risks of eye-tracking data, including unique user identification. Biometric re-identification could allow cross-app identification that connects a user's personal ID with their work ID without needing their consent, for example. Solutions are presented that address concerns related to the leaking of biometric features through eye-tracking data streams. Privacy mechanisms are introduced to reduce the risk of identification with formal guarantees while still enabling ML applications of released eye-tracking data streams. Gaze data streams can thus be made private while still allowing for applications key to the future of mixed-reality technology, such as applying deep gaze prediction models for foveated rendering, and models for activity or document type classification.

**BIO:** Dr. Brendan David-John is an Assistant Professor of Computer Science at Virginia Tech. David-John was the first Native male to graduate with a doctorate in Computer Science from the University of Florida in 2022, and received his BS and MS from the Rochester Institute of Technology in 2017. He is from Salamanca NY, which is located on the Allegany reservation of the Seneca Nation of Indians. His personal goals include increasing the representation of Native Americans in STEM and higher education, specifically in computing. He is a proud member of the American Indian Science & Engineering Society and has been a Sequoyah Fellow since 2013. His research interests include virtual reality and eye tracking, with a primary focus on privacy and security for the future of virtual and mixed reality.



## Thursday Aug 24 (Day 2)

Golisano Hall/GCI CYB 70-2780

**9:00 - 9:30 a.m.** Pre-meeting session by Dr. Shinohara:  
MSI visits and completion of visit form (bring CV)  
Participants:  
Liya, Mahsa, Marzieh, Michael, Rodney, Will

**9:30 - 10:15 a.m.** [Breakfast: Trainee Council overview with Director](#)

**10:15 - 11:00 a.m.** Session V

### *Seed funding award competition*

Esa Rantanen, Seed funding chair  
Prior winner Emily Kuang, PhD trainee

**11:00 - 12:00 p.m.** Session VI



### **Pre-tenure Scientist Plenary Talk in CYB-1750 Cyber Range, Global Cybersecurity Center**

*Providing Privacy for Eye-Tracking Data with  
Applications in XR*

Dr. Brendan David-John  
Assistant Professor, Virginia Tech  
Introduced by Dr. Kristen Shinohara

**12:00 - 1:00 p.m.**

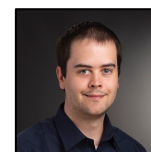
[Debriefing lunch break with Dr. Sahin](#)

**1:00 - 2:00 p.m.**

Research to Mentoring Bridge: HCI for AI



Dr. Shinohara



Dr. Tigwell



Dr. Peiris

**2:00 - 2:45 p.m.**

Research to Mentoring Bridge: AI Hardware



Dr. Sahin



Dr. Yan

**2:45 - 3:30 p.m.**

[Coffee and interaction with plenary speaker](#)

**3:30 - 4:15 p.m.**

Session VII

### *Evaluator's pre-survey*

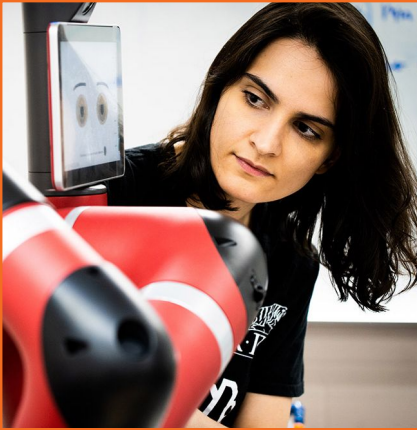
Introduction by Ferat Sahin

**4:15 - 5:30 p.m.**

NRT Trainees' breakout groups  
by research tracks for planning and  
final research plan/lightning talk preparations

### **Links:**

AWARE-AI Twitter <https://twitter.com/AWAREAINRT>  
AWARE-AI Instagram [https://www.instagram.com/rit\\_awareai](https://www.instagram.com/rit_awareai)  
Lab rotations form <https://forms.gle/9zNW06gPRcwqSR0C8>  
Internship form <https://forms.gle/V2biDMp5Q2JPnX5K9>  
MSI form <https://forms.gle/vg3vnwiyw2eRDdHs8>



## Friday Aug 25 (Day 3)

Golisano Hall/GCI CYB 1710-1720

8:45 - 9:30 a.m.

Breakfast and virtual interaction with Dr. Callison Burch

9:30 - 10:30 a.m.

Session VIII



### *Conflict resolution in research teams*

Joe Johnston/Ashley Meyer, Ombuds Office  
Chair: Dr. Esa Rantanen

10:30 - 11:15 a.m.

Research to Mentoring Bridge: Cognitive Models for AI



Dr. Rantanen

Dr. Heard

Dr. Fitch

11:15 - 12:00 p.m.

Session IX

*Workshop on professional communication:  
Setting Up LinkedIn, Google Scholar, and  
considerations for your professional website*

Chairs and Faculty Respondents:  
Ferat Sahin, Esa Rantanen

12:00 - 1:00 p.m.

Peer-2-Peer Program

Lunch with peer mentor interactions

Chair: Dr. Ferat Sahin

1:00 - 2:45 p.m.

Session X

Chair: Dr. Esa Rantanen

NRT Trainees: Research plan talks  
(12 min + 3 min Q&A):



T1: M. Mozaffari



T1: M. Peechatt



T2: R. Sanchez



T3: M. Shahbazi



T3: L. Thomas



T4: W. Gebhardt

2:45 - 3:30 p.m.

Coffee celebration of AWARE-AI alumni

3:30 - 5:00 p.m.

Session XI

Incoming NRT Trainees: Lightning talks  
(5 min each + Q&A)

Chair: Dr. Kristen Shinohara

*F. Hyder, G. Park, H. Hendy, M. Raziuddin  
Chowdhury, N. Sahar, R. Ramadass, R.  
Fayyazi, R. Sahay, Y. Wang*

5:00 p.m.

Concluding remarks by Dr. Cecilia Alm