

BIOENGINEERING

Spring 2021 Seminar

Date: Thursday, March 18, 2021

Time: 12:00 pm - 1:00pm

Location: Virtual

Join Zoom Meeting

[https://gmu.zoom.us/j/98805494005?](https://gmu.zoom.us/j/98805494005?pwd=M1A2R1BaSEdqa2hhOUltTE5YeWxtdz09)

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Meeting ID: 988 0549 4005 Passcode: 454698



Eva Dyer, Ph.D.

Biography: Eva Dyer is an Assistant Professor in the Coulter Department of Biomedical Engineering at the Georgia Institute of Technology and Emory University. Dr. Dyer works at the intersection of neuroscience and machine learning, developing machine learning approaches to interpret complex neuroscience datasets, and designing new machine intelligence architectures inspired by the organization and function of biological brains. Dr. Dyer completed all of her degrees in Electrical & Computer Engineering, obtaining a Ph.D. and M.S. from Rice University, and a B.S. from the University of Miami. She is the recipient of a Sloan Fellowship in Neuroscience, an NSF CISE Research Initiation Initiative Award, was a previous Allen Institute for Brain Science Next Generation Leader, and was recently awarded a McKnight Award for Technological Innovations in Neuroscience.

Title: Representation Learning and Alignment in Biological and Artificial Neural Networks

Abstract: Good representations are critical to the success of both biological and artificial information processing systems. In this talk, I will highlight new approaches that my lab is developing for representation learning and alignment, and demonstrate their applications in the analysis and interpretation of both biological and artificial neural networks. I argue that being able to align neural representations, promises meaningful ways of comparing high-dimensional neural activities across time, subsets of neurons, individuals, and potentially across disease.