

Train Your Network: simplifying computer vision application development

In this workshop, we will discuss the background and motivations for developing Train Your Network, a software aimed at facilitating the creation of customized computer vision tools for non-expert users. We will demonstrate how to use the developed tool to train customized deep learning algorithms to perform image classification, a common computer vision task, on datasets provided by the user. An easy-to-use user interface allows users with no previous programming experience to train their own image classification neural networks and use such networks to perform predictions on newly chosen images. Our goal is to create more accessible user interfaces so that coding abilities are no longer a barrier for developing computer vision applications.

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Workshop Presenters



Rafael Ferreira is an Electrical and Computer Engineer & Ph.D. candidate in the Animal & Dairy Sciences department at University of Wisconsin-Madison, in Dr. Dorea's lab. He is currently interested in developing computer vision systems to improve dairy farm management and phenotyping.



Tiago Bresolin is an Assistant Professor in the Department of Animal Sciences at University of Illinois Urbana-Champaign. His research explores statistical & computational biology methods to analyze large phenotype and genomic datasets, leveraging the power of machine learning and camera systems to generate novel and difficult-to-measure phenotypes, and integrating multi-omics data using statistical and machine learning techniques.



Joao Dorea is an Assistant Professor in the Department of Animal and Dairy Sciences at the University of Wisconsin-Madison. His research focuses on precision agriculture and data analytics to improve farm management decisions using phenotyping methods such as computer vision systems, wearable sensors, and infrared spectroscopy to monitor animal nutrition, health, and welfare.

December 9, 2022

11:00 AM - 1:00 PM
(Central Time, UTC-6)

Purpose:

Demonstrate a new image classification program, "Train Your Network", designed for use by anyone, including the most novice users of AI.

Register for this Zoom virtual workshop:

<https://tinyurl.com/AG2PI-w17>

Upon registration, you will receive a confirmation email with information about joining the meeting.

A recording will be available at a later date at: www.ag2pi.org.

Registration is not required to view the recording.