Utilizing Convolutional Neural Networks for Global Seagrass Habitat Mapping

Convolutional neural networks (CNNs) are becoming an increasingly prevalent machine learning algorithm due to their high accuracy and lack of reliance on heuristic processes. One of the major drawbacks of convolutional neural networks is their reliance on large amounts of training data in order to generate sensible results. This talk will cover how our team has utilized the strengths and overcome the weaknesses of convolutional neural networks as they apply to seagrass habitat mapping. We will share our technical CNN results over time, detail the requirements and challenges that our team overcame and explore how other teams can better incorporate a stronger seagrass component into their machine learning projects.

Peter J. Whitman
whitman.peter@epa.gov
United States Environmental Protection Agency (EPA), Research Triangle Park (RTP), North Carolina