

# MACHINE LEARNING IN PYTHON FOR ENVIRONMENTAL SCIENCE PROBLEMS: MACHINE LEARNING HACKATHON

**Short Course Organizers**  
Ben Toms and Amanda Burke

**AMS COMMITTEE ON ARTIFICIAL INTELLIGENCE APPLICATIONS TO ENVIRONMENTAL SCIENCE**

**SUNDAY, JANUARY 12, 2020**

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
8:30 AM	INTRODUCTION, GROUP FORMATION	Karthik Kashinath, Lawrence Berkeley National Laboratory, Berkeley, CA
9:00 AM	WORKING SESSION	
10:30 AM	COFFEE BREAK	
10:45 AM	WORKING SESSION	
12:00 PM	LUNCH (INCLUDED)	
12:45 PM	WORKING SESSION	
3:00 PM	FINAL SUBMISSIONS, SUMMARY, EVALUATIONS	
3:45 PM	COURSE END	

## **WORKING SESSION**

The hackathon will focus on an atmospheric science predictability problem based on earth system data, including representative time-series of atmospheric and oceanic variability. Participants will be organized into teams to predict the likelihood of extreme temperatures using the dataset provided. Each team will be challenged with interpreting their developed model, to provide valuable scientific insights into how and why their model makes its predictions.