# How to Train Your Pet Computer

Machine learning and artificial intelligence are becoming so prevalent in today’s society that having an understanding and hand-on experience with machine learning is a must for any scientific or data science career. Machine learning is especially becoming a central tool in science, from understanding the human body and diagnosing cancers, to speeding up DFT calculations and predicting properties of chemical systems and reaction mechanisms, and beyond to interrogating mass amounts of scientific data.

In this workshop, we will be learning about supervised and unsupervised machine learning algorithms and applying them hands-on with the Python programming language. We will then apply our skills to real-world dataset to understand how big data can be investigated using machine learning and create useful tools such as machine vision algorithms.

**No prior knowledge of machine learning or any coding experience in Python or any other language is required for this workshop.**

**Requirements**: **Bring your laptop to the MESA bootcamp. THIS IS A MUST FOR THIS WORKSHOP.**