

Cougar AI Age Predictor App Project Outline

Week 1: Intro to Machine Learning and Single Layer Networks

- Define machine learning and supervised learning
- Supervised learning gradient descent forward and backward propagation
- Follow along code example to end the session
- Note: In this week, a single layer network will be built from scratch using numpy

Week 2: Multilayer Networks

- Go over how multilayer networks work
- Go over our Cat vs Dog classifier
- Follow along code example to end the session

Week 3: Convolution Neural Networks and Residual Networks

- Explain why CNN are needed for computer vision
- Go over how CNN kernels extract features
- Code example to take home

Week 4: CNN and Res Review

- Go over the CNN given last week and answer any questions that come up

Week 5: Transfer Learning, GUI, Coding Standards, and Begin to Build Age Predictor

- Go over transfer learning
- At a high-level explain residual networks
- Go over GUI and coding standards
- Begin to build Age Predictor

Week 6 and Beyond: Age Predictor App

- Continue building age predictor