deeplearning.ai

Overview

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Course Info

Week 1

Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning

Week 1
Discuss this week's modules here.

686 threads · Last post 4 hours ago

Go to forum

A New Programming Paradigm

👤 Laurence Moroney

Welcome to this course on going from Basics to Mastery of TensorFlow. We're excited you're here! In week 1 you'll get a soft introduction to what Machine Learning and Deep Learning are, and how they offer you a new programming paradigm, giving you a new set of tools to open previously unexplored scenarios. All you need to know is some very basic programming skills, and you'll pick the rest up as you go along. You'll be working with code that works well across both TensorFlow 1.x and the TensorFlow 2.0 alpha. To get started, check out the first video, a conversation between Andrew and Laurence that sets the theme for what you'll study...

∧ Less

A new programming paradigm

📖 **Reading:** Before you begin: TensorFlow 2.0 and this course   10 min

▶ **Video:** Introduction: A conversation with Andrew Ng   3 min   **Resume**

▶ **Video:** A primer in machine learning   3 min

▶ **Video:** The 'Hello World' of neural networks   5 min

📖 **Reading:** From rules to data   10 min

▶ **Video:** Working through 'Hello World' in TensorFlow and Python   3 min

📖 **Reading:** Try it for yourself   10 min

📄 **Quiz:** Week 1 Quiz   8 questions   Due Nov 9, 1:59 AM CST

Weekly Exercise - Your First Neural Network

📖 **Reading:** Introduction to Google Colaboratory   10 min

⟨/⟩ Get started with Google Colaboratory (Coding TensorFlow)   4 min

🗔 **Lab:** Exercise 1 (Housing Prices)   1h

⟨/⟩ **Programming Assignment:** Exercise 1 (Housing Prices)   3h   Due Nov 9, 1:59 AM CST

📖 **Reading:** Week 1 Resources   10 min

Optional: Ungraded Google Colaboratory environment

Ungraded External Tool: Exercise 1 (Housing Prices) 1h

Ungraded External Tool: Exercise 1 (Housing Prices) 1h