

# Artificial Intelligence: Principle and Practice

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**Free 8-day workshop bringing you to the cutting-edge of artificial intelligence theory and technique!**

This completely free workshop is intended to give undergraduate and graduate students from all science and engineering majors a fast introduction to the modern artificial intelligence theory and technique with special emphasis on machine learning.

It will be held in 80-minute online sessions twice a week over 8 days of October. To accomodate varied schedules, sessions will be held on:

- Mondays and Wednesdays (12:30 - 1:50pm)
- Tuesdays and Thursdays (12:30 - 1:50pm)
- Saturdays (2:00 - 3:20pm and 3:30 - 4:50pm)

All times listed in Central time. Day 1: **Sat. Oct. 2 / Mon. Oct. 4 / Tue. Oct. 5 2021**

Website: <https://tinyurl.com/ai-principle-and-practice>

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We will study:

- ‘Classical’ AI shortcomings and modern symbolic progressing techniques
  - Machine learning fundamentals, neural networks, and deep learning
  - Computer vision, sequence modeling, natural language processing, deep graph processing
  - Reinforcement learning, multi-agent RL, self-supervised learning, transfer learning, and domain generalization
  - MLops, AI safety, and ethics
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We will use:

- Python
  - NumPy , Pandas , Matplotlib
  - TensorFlow , Keras , transformers
  - OpenAI gym , PettingZoo , ThreeDWorld
  - tensorboard , wandb , docker, and the Google Cloud Platform
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Before signing up, you should already be able to calculate basic derivatives, apply probability & statistics to toy problems, and write simple Python programs.

If your neurons have accumulated sufficient presynaptic evidence and your reward estimator feels like it's ready to explode, please [join](#) this exciting workshop!

ps: (Much of this document was drafted by a language generation model.)