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# Student Resources

## Artificial Intelligence

 Website for Artificial Intelligence: A Modern Approach (AIMA) - Supporting materials for students and instructors.

• AIMA Glossary - Glossary of terms used in the text.

### Al Video Tutorials

- MIT undergraduate Al course Inspiring lectures and curated materials from a true expert in the field.
  - Tutorials Inform your understanding of algorithms by solving problems hand. Only when you
    understand how an algorithm works and can demonstrate it to others, are you ready to start
    coding. Not only does Jessica Noss have the best explanations. Her tutorials have the best sound
    and video quality too.
  - Instructor: Patrick Winston teaches Al and CS at MIT, headed the MIT Artificial Intelligence
     Laboratory for 25 years, and started his own company Ascent Technology that solves complex
     constraint satisfaction problems.

## Python 3

- Python Short Course Get started quickly with modern Python. These materials are optional, and intended to get you up to speed for Python-based courses at Regis University.
- Real Python Accessible and well written tutorials on a wide-variety of relevant Python topics. More coming every day. A highly recommended site.
- Python Tutor Visualize your Python code at runtime -- an invaluable tool for learning about and debugging issues with Python data structures. If you are struggling with your code, cut and paste your code into Python Tutor to better understand why it is behaving like it is. Python Tutor is especially valuable in understanding Python data structures.
- LearnPython.org An interactive introduction Python 3 tutorial. Like Python Tutor only with explanations and diagrams.
- Sorcratica Python Programming Tutorials Excellent introduction to python programming in short wellproduced videos with a matrix vibe. A highly recommended site.
- Let's learn Python 3 in your PJ's Introductory video tutorial on Python 3 for beginners.
- Python 3 Tutorial An intermediate tutorial for Python 3
- Think Python An excellent introduction to Python3 for beginners that is freely available online, if you like it, consider buying a physical copy.
- Dive into Python 3 Another outstanding free online textbook, only this one is for experienced programmers. Again if you like it consider buying a copy.

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• The Hitchhiker's Guide to Python - A curated list of Python tutorials each with a short description.

#### Markdown Text

Markdown is an easy-to-read, easy-to-write syntax for formatting plain text.

- 1. Mastering Markdown Learn markdown quickly and easily with this guide from Github.
- 2. Markdown Cheatsheet A concise guide to markdown syntax and its resulting appearance.

### Command Line

Coding involves using the command line and learning how is made easy these great tutorials.

- 1. Djanjo Girls Command Line Tutorial An accessible introduction to the command line for Windows, macOS, and Linux.
- 2. Briana's Bash Tutorial: How to Use the Command Line in Linux, Windows, and Mac An introductory tutorial video into learning commands commonly used in software development. The first 5 minutes explains most of what you need to know for coding. Text editors and colorizing your terminal are covered too.

#### **Podcasts**

- Talking Machines A view into cutting edge research in the world of Al and machine learning.
- Partially Derivative "Partially Derivative is a podcast about data science in the world around us" including many episodes on Al. Existing episodes are well worth listening to; regrettably, no new ones are coming.
- Talk Python to Me Interviews with developers in the Python space about their projects and technology choices behind them.