اهم المواقع التعليمية في مجال بحوث العمليات والتقنيات الذكائية

edX:-1

الرابط : https://www.edx.org

تقدم دورات من جامعات عريقة مثل جامعتي (Harvard, UC Berkeley) تشمل برامج مثل

(X Series, Micro Master)

كما تقدم دورات في المواضيع التالية :

Data Science-1

Artificial Intelligence-2

Optimization Programs-3

Udemy: -2

الرابط: https://www.udemy.com

تضم مجموعه واسعة جدا من الدورات التي يقدمها خبراء مستقلون في المواضيع التالية :

Optimization Modeling -1

Operations Research/Linear Programming for Beginner -2

Python for Data Science and Machine Learning Bootcamp -3

FutureLearn – AI and Data Science Courses-3

الرابط : https://www.futurelearn.com

دورات عن الذكاء الاصطناعي وعلوم البيانات وتطبيقاتها في اتخاذ القرار.

https://www.futurelearn.com

Coursera – Operations Research & AI Courses -4

الرابط : https://www.coursera.org

يقدم دورات من جامعات عالمية في بحوث العمليات والذكاء الاصطناعي.

Open AI Blog / Documentation: -5

الرابط https://platform.openai.com/docs/ أو : https://openai.com/blog/

يوفر هذا الموقع مقالات تقنية وشروحات لمفاهيم متقدمة في الذكاء الاصطناعي التوليدي وتعلم التعزيز

MIT OpenCourseWare – Operations Research -6

الرابط

https://ocw.mit.edu/courses/find-by-topic/#cat=engineering&subcat=operationsresearch

كورسات مجانية من معهد MIT في بحوث العمليات

OR-Tools by Google-7

الرابط .
https://developers.google.com/optimization

مكتبة مفتوحة المصدر لخوارزميات بحوث العمليات

Coursera – Operations Research Courses-8

الرابط :

https://www.coursera.org/search?query=operations%20research

منصّة تقدم مساقات من جامعات مرموقة في بحوث العمليات وتحسين اتخاذ القرار

NPTEL -9 الهند

الرابط :

https://nptel.ac.in/courses/111/107/111107128/

موقع هندي يقدم كورسات مجانية ومرئية في الرياضيات التطبيقية وبحوث العمليات.

10- **الباحث العلمي**

الرابط

https://scholar.google.com

أبحاث علمية في بحوث العمليات والذكاء الاصطناعي

Examples: "Optimization" courses from MIT, "Artificial Intelligence" courses from Columbia University, "Data Science" programs.

1. **edX:**
    - **Link:** https://www.edx.org/
    - **Importance:** Another leading platform offering courses from prestigious universities like MIT, Harvard, and UC Berkeley. It includes MicroMasters programs and XSeries.
    - **Examples:** "Optimization" courses from MIT, "Artificial Intelligence" courses from Columbia University, "Data Science" programs.
2. **Udemy:**
    - **Link:** https://www.udemy.com/
    - **Importance:** Features a very wide range of courses taught by independent experts. While not always strictly academic, it offers excellent practical courses in Python for AI, machine learning, optimization modeling, and more.
    - **Examples:** "Python for Data Science and Machine Learning Bootcamp," "Operations Research/Linear Programming for Beginners."

For Open Academic and University Resources:

4. **MIT OpenCourseWare (OCW):**
    - **Link:** https://ocw.mit.edu/
    - **Importance:** Provides free educational materials from actual MIT courses, including lecture notes, assignments, and readings. Look for materials in "Operations Research," "Artificial Intelligence," "Optimization," and "Machine Learning."
    - **Examples:** "Introduction to Algorithms," "Optimization Methods," "Artificial Intelligence."
5. **Stanford Online (CS229 - Machine Learning):**
    - **Link:** (You may need to search within the site for specific courses) https://online.stanford.edu/

    - **Importance:** Stanford University offers excellent courses, and its CS229 (Machine Learning) course by Andrew Ng is partially or fully available as open educational resources online.
6. **Google Developers (especially for AI and Machine Learning):**
    - **Link:** https://developers.google.com/ (then search for "AI" or "Machine Learning")
    - **Importance:** Google provides practical learning resources, tools, and libraries (like TensorFlow) with comprehensive documentation, tutorials, and courses (e.g., Machine Learning Crash Course).

For Specialized Resources and Open Books:

7. **OpenAI Blog / Documentation:**
    - **Link:** https://openai.com/blog/ or https://platform.openai.com/docs/
    - **Importance:** Besides being a leading AI company, it offers technical articles and explanations of advanced concepts in generative AI, reinforcement learning, and more.
8. **Distill.pub (no longer updated but still a great resource):**
    - **Link:** https://distill.pub/
    - **Importance:** A site that offers high-quality interactive research articles and explanations of complex concepts in machine learning and neural networks. Excellent for deep understanding.

For Programming Tools and Libraries (with Educational Resources):

9. **TensorFlow & Keras Documentation:**
    - **Link:** https://www.tensorflow.org/
    - **Importance:** An open-source machine learning library from Google. The website contains comprehensive tutorials for beginners and advanced users, along with code examples.
10. **PyTorch Documentation:**
    - **Link:** https://pytorch.org/
    - **Importance:** Another prominent open-source machine learning framework (from Meta). The site provides excellent tutorials, examples, and community resources.