FREE ARTIFICIAL INTELLIGENCE RESOURCES

WHAT IS AI?

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

WHY CHOOSE AI?

Artificial Intelligence is advancing by leaps and bounds. Recent research in the fields of Data Science, Machine Learning, Natural Language Processing and other subfields of AI has already started to impact the lives of common people. AI is no longer a superficial concept but is already used by tech giants, companies, and startups to solve everyday problems. That's why choosing AI as a career path is really rewarding in the long run.

Even if your profession is not directly related to tech, it's said that AI will disrupt every field in one way or another. That's why you need to have at least a basic understanding of how AI works.

FREE AI COURSES:

- EdX's Artificial Intelligence - (https://www.edx.org/course/artificial-intelligence-ai)

- Udacity’s Intro to Artificial Intelligence - (https://www.udacity.com/course/intro-to-artificial-intelligence--cs271)

- Artificial Intelligence: Principles and Techniques By Stanford - (http://web.stanford.edu/class/cs221/)

- Udacity’s Artificial Intelligence for Robotics by Georgia Tech - (https://www.udacity.com/course/artificial-intelligence-for-robotics--cs373)

- IBM's Data Science and Cognitive Computing courses - (https://cognitiveclass.ai/)

- Elements of AI - (https://www.elementsofai.com/)

- Building AI - (https://buildingai.elementsofai.com/)

- Intellipaat's Artificial Intelligence - (https://intellipaat.com/academy/course/artificial-intelligence-free-course/)

- EdX/Harvard University's CS50: Introduction to Artificial Intelligence with Python - (https://www.edx.org/course/cs50s-introduction-to-artificial-intelligence-with-python)

- Microsoft AI School - (https://aischool.microsoft.com/en-us/home)

- Learn with Google AI - (https://ai.google/education/)

- Crash Course - Artificial Intelligence - (https://www.youtube.com/watch?v=GvYYFloV0aA&list=PL8dPuuaLjXtO65LeD2p4_Sb5XQ51par_b)

🔢 FREE MATHEMATICS RESOURCES:

****Videos:****

- All Levels/Pre-U - (http://www.patrickjmt.com/)

- All Levels/Pre-U - (http://www.khanacademy.org/)

- College - (http://ocw.mit.edu/OcwWeb/web/courses/courses/index.htm#Mathematics)

- College - (https://www.youtube.com/channel/UCoHhuummRZaIVX7bD4t2czg)

- College - (https://www.youtube.com/channel/UC2F-j2KMho0zVWIPFKWoXoA/videos)

- All - (https://www.youtube.com/channel/UCNVMxRMEwvo9AS-Jfh6fQFg)

- College - (http://www.youtube.com/user/njwildberger)

- College - (https://www.youtube.com/user/MathDoctorBob)

- High-School/ College - (https://www.youtube.com/channel/UCfbSz1B68ytEKX0D6AFdddQ)

- All Levels/ Pre-U - (http://www.mathtv.com/)

- All Levels/Pre-U - (https://www.youtube.com/user/profrobbob)

- All Levels/Pre-U - (http://www.hippocampus.org/)

- GCSE Level - (https://www.youtube.com/user/schoolmaths)

****For Fun:****

- 3Blue1Brown - (https://www.youtube.com/channel/UCYO_jab_esuFRV4b17AJtAw)

- Mathologer - (https://www.youtube.com/channel/UC1_uAIS3r8Vu6JjXWvastJg)

- MathologerII - (https://www.youtube.com/channel/UCH74Hc_7WYVzx1GXhLEH6Eg)

- ViHart - (https://www.youtube.com/channel/UCOGeU-1Fig3rrDjhm9Zs_wg)

- MindYourDecisions - (https://www.youtube.com/channel/UCHnj59g7jezwTy5GeL8EA_g)

- Tipping-Point-Math - (https://www.youtube.com/channel/UCjwOWaOX-c-NeLnj_YGiNEg)

- WelchLabs - (https://www.youtube.com/channel/UConVfxXodg78Tzh5nNu85Ew)

- Infinite Series - (https://www.youtube.com/channel/UCs4aHmggTfFrpkPcWSaBN9g)

- Vsauce - (https://www.youtube.com/channel/UC6nSFpj9HTCZ5t-N3Rm3-HA)

- Numberphile - (https://www.youtube.com/channel/UCoxcjq-8xIDTYp3uz647V5A)

- Blackpenredpen - (https://www.youtube.com/user/blackpenredpen)

- AI and Games youtube channel - (https://www.youtube.com/channel/UCov_51F0betb6hJ6Gumxg3Q)

- A.I. and Machine Learning in Unity, Sebastian Schuchmann youtube channel - (https://www.youtube.com/c/SebastianSchuchmannAI)

****Example problems and online notes/references:****

- Example Problems - (http://www.exampleproblems.com/)

- Interact math - (http://www.interactmath.com/)

- Pauls online Math notes - (http://tutorial.math.lamar.edu/)

- Calculus org - (http://www.calculus.org/)

- Wolfram Mathworld - (http://mathworld.wolfram.com/)

- CTY Online AP & College Math Resources - (https://sites.google.com/a/ctyonline.net/jdinoto/)

- J.S. Milne's Site - (http://www.jmilne.org/math/)

- History of Math - (http://www-history.mcs.st-and.ac.uk/)

- Harvey Mudd College's Online Math Tutorials - (http://www.math.hmc.edu/calculus/tutorials/)

- Real (and some complex) Analysis & Programming - (http://www.mathcs.org/)

****Computer Algebra Systems:****

- SAGE - (http://www.sagemath.org/index.html)

- Maxima - (http://maxima.sourceforge.net/)

- Octave - (http://www.gnu.org/software/octave)

- Wolfram Alpha- (http://www.wolframalpha.com/)

- Geogebra - (http://www.geogebra.org/cms)

- PARI/GP - (https://pari.math.u-bordeaux.fr/)

****Graphics And Visualizing Mathematics:****

- GeoGebra - (http://www.geogebra.org/cms)

- gnuplot - (http://www.gnuplot.info/)

- garminder - (http://www.gapminder.org/)

- Wolfram Demonstrations Project - (http://demonstrations.wolfram.com/)

- wolframa - (http://www.wolframalpha.com/)

- scipy- (http://www.scipy.org/)

- Microsoft Mathematics* - (http://www.microsoft.com/downloads/en/details.aspx?FamilyID=9caca722-5235-401c-8d3f-9e242b794c3a)

- Winplot - (http://math.exeter.edu/rparris/winplot.html)

- Desmos - (http://desmos.com/calculator/)

- Symbolab - (http://www.symbolab.com/)

- Scilab - (http://www.scilab.org/)

****TypeSetting (Latex):****

- TeX Users Group - (http://www.tug.org/)

- The Comprehensive TeX Archive Network - (http://www.ctan.org/)

- Art of Problem Solving Tutorial - (http://www.artofproblemsolving.com/LaTeX/AoPS_L_About.php)

- TexPaste - (http://www.texpaste.com/)

- Xfig - (http://www.xfig.org/)

- Detexify - (http://detexify.kirelabs.org/classify.html?)

- WriteLaTeX WYSIWYG - (https://www.writelatex.com/)

- LaTeX Examples - (http://www.texample.net/)

****Blogs/Articles:****

- Terry Tao - (http://terrytao.wordpress.com/)

- American Mathematical Society - (http://blogs.ams.org/blogonmathblogs/)

- AMS notices - (http://www.ams.org/notices/)

- The n-Category Café - (https://golem.ph.ut

exas.edu/category/)

- John Baez - (http://math.ucr.edu/home/baez/)

- Tim Gowers - (http://www.dpmms.cam.ac.uk/~wtg10/)

- Cambridge Mathmatics - (http://www.maths.cam.ac.uk/)

- Eltsacado - (http://www.eltsacado.com/)

- mathtube - (http://mathtube.org/)

- Environmental Matheycologist - (http://www.celsias.com/)

- Teaching Highschool Math - (http://fawn.ngcsu.edu/)

- Mathematics under the Microscope -
(http://www.math.ucr.edu/home/baez/)