# An awesome list of resources for people excited to learn about computer science!

If you're feeling generous, don't forget to contribute back with the cool things that you find!

**Bold** items are highly recommended!

An awesome list of resources for people excited to learn about computer science!

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General
Python
Game Design
Web Development
Cybersecurity
Cryptography
Linux
C
Reverse Engineering
Competitive Programming
Computer Graphics
Other Good Stuff
```

## General

- <a href="https://drive.google.com/drive/folders/1LpbI-elangfhU9nngAM-0GAKmmUCvtiB">https://drive.google.com/drive/folders/1LpbI-elangfhU9nngAM-0GAKmmUCvtiB</a> Watch every meeting recording!
- <a href="https://drive.google.com/drive/folders/15CqqSpmTy3zXFHfSC0ppg8Mh52OCa3Wm">https://drive.google.com/drive/folders/15CqqSpmTy3zXFHfSC0ppg8Mh52OCa3Wm</a> MS Google Drive folder
- <a href="https://drive.google.com/drive/folders/1JsVTEIJH2NybnTohN\_mvOozjR\_Paox20">https://drive.google.com/drive/folders/1JsVTEIJH2NybnTohN\_mvOozjR\_Paox20</a> HS Google Drive folder
- <a href="https://stackoverflow.com/">https://stackoverflow.com/</a> Godly resource for looking up questions
- <a href="https://replit.com/">https://replit.com/</a> Great online editor for many programming languages
- <a href="https://code.visualstudio.com">https://code.visualstudio.com</a> Awesome IDE for many languages (free, works everywhere, highly customizable)

- <a href="https://kate-editor.org/">https://kate-editor.org/</a> Super fast and powerful editor that just works™
- https://code.org/ Coding tutorials
- <a href="https://github.com/LadueCS">https://github.com/LadueCS</a> Ladue CS GitHub
- https://discord.gg/uZYJHvzfZH Ladue CS Discord
- <a href="https://matrix.to/#/!wiowujrzEAirReYauW:exozy.me?via=exozy.me">https://matrix.to/#/!wiowujrzEAirReYauW:exozy.me?via=exozy.me</a> Ladue CS Matrix
- <a href="https://github.com/EbookFoundation/free-programming-books">https://github.com/EbookFoundation/free-programming-books</a> Free programming books
- <a href="https://freecodecamp.org">https://freecodecamp.org</a> Free coding courses; WARNING: very long!

# Python

- <a href="https://repl.it/@Ta180m/Intro-to-Python-v2">https://repl.it/@Ta180m/Intro-to-Python-v2</a> The best™ introduction to Python
- <a href="https://pythondiscord.com/">https://pythondiscord.com/</a> The Python Discord
- <a href="https://www.learnpython.org/">https://www.learnpython.org/</a> Another Python tutorial
- https://codingbat.com/python Learn Python by solving problems!
- <a href="https://wiki.python.org/moin/BeginnersGuide/NonProgrammers">https://wiki.python.org/moin/BeginnersGuide/NonProgrammers</a> A lot of good tutorials
- https://docs.python.org/3/tutorial/index.html Want an extra challenge? Try this advanced tutorial
- <a href="https://www.jetbrains.com/pycharm/download/">https://www.jetbrains.com/pycharm/download/</a> Awesome Python IDE (community edition is free, requires download and a computer)

# Game Design

- <a href="https://scratch.mit.edu/">https://scratch.mit.edu/</a> Graphical programming language
- <a href="https://godotengine.org/">https://godotengine.org/</a> Easy-to-use game engine where you write "real" code!
- <a href="https://www.pygame.org/news">https://www.pygame.org/news</a> Python game engine

- YouTube: Career advice, live streamed game-jams (aka speedrun making games in 1-4 days)

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## Web Development

- <a href="https://www.freecodecamp.org/learn/responsive-web-design/">https://www.freecodecamp.org/learn/responsive-web-design/</a> Web dev tutorials
- <a href="https://www.w3schools.com/">https://www.w3schools.com/</a> Web dev reference
- <a href="https://developer.mozilla.org/en-US/">https://developer.mozilla.org/en-US/</a> Advanced web dev reference
- <a href="https://www.djangoproject.com/">https://www.djangoproject.com/</a> Python web framework
- <a href="https://nextjs.org/">https://nextjs.org/</a> Easy React JavaScript framework
- <a href="https://roadmap.sh/">https://roadmap.sh/</a> Web developer roadmaps

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## Cybersecurity

- <a href="https://drive.google.com/drive/folders/1\_gRzNS1bUKReRs2z8rn8g7w1ZA30mkcA">https://drive.google.com/drive/folders/1\_gRzNS1bUKReRs2z8rn8g7w1ZA30mkcA</a>
  Google Drive folder with lots of resources
- <a href="https://drpcyber.blogspot.com/">https://drpcyber.blogspot.com/</a> Webpage for the HS Cybersecurity course
- <a href="https://en.wikipedia.org/wiki/Computer\_security">https://en.wikipedia.org/wiki/Computer\_security</a> A nice overview of cybersecurity
- <a href="https://www.nist.gov/itl/applied-cybersecurity/nice/resources/online-learning-content">https://www.nist.gov/itl/applied-cybersecurity/nice/resources/online-learning-content</a> A long list of free cybersecurity resources
- https://www.reddit.com/r/learnprogramming/comments/5bam56/i want to learn cy ber security where should i/ Some good advice
- https://cybersecuritybase.mooc.fi/ A great resource for starting out
- <a href="https://www.reddit.com/r/learnprogramming/comments/32g958/looking\_to\_get\_star\_ted\_in\_cybersecurity/cqazmcn/">https://www.reddit.com/r/learnprogramming/comments/32g958/looking\_to\_get\_star\_ted\_in\_cybersecurity/cqazmcn/</a> Some more good advice
- https://www.hackthebox.eu/ "A Massive Hacking Playground"

## Cryptography

- <a href="https://en.wikipedia.org/wiki/Cryptography">https://en.wikipedia.org/wiki/Cryptography</a> Good overview to find topics that you're interested in learning more about
- http://index-of.co.uk/Hacking-Coleccion/164%20-%20The%20Code%20Book%20How%20To%20Make%20It,%20Break%20It,%20Hack%20It,%20Crack%20It%20%5B-PUNISHER-%5D.pdf The best cryptography book. Very accessible too.
- <a href="https://www.tutorialspoint.com/cryptography/index.htm">https://www.tutorialspoint.com/cryptography/index.htm</a> Cryptography tutorial

#### Linux

- <a href="https://www.kali.org/docs/wsl/win-kex/">https://www.kali.org/docs/wsl/win-kex/</a> Kali on WSL setup guide
- https://www.tutorialspoint.com/kali\_linux/index.htm Kali Linux tutorial
- https://medium.com/quick-code/top-tutorials-to-learn-kali-linux-for-beginners-131a65 4b81ad Kali Linux tutorial
- <a href="https://ubuntu.com/download/desktop/thank-you?version=20.04.2.0&architecture="amd64">https://ubuntu.com/download/desktop/thank-you?version=20.04.2.0&architecture="amd64">amd64</a> If you want a fun challenge, try installing Ubuntu on your computer and play around with it!
- <a href="https://askubuntu.com/">https://askubuntu.com/</a> Basically Stack Overflow for Ubuntu and Linux

#### C

- https://www.learn-c.org/ Learn C
- <a href="https://www.tutorialspoint.com/cprogramming/index.htm">https://www.tutorialspoint.com/cprogramming/index.htm</a> C tutorial

## Reverse Engineering

- https://en.wikipedia.org/wiki/Reverse engineering
- <a href="https://blog.udemy.com/reverse-engineering-tutorial/">https://blog.udemy.com/reverse-engineering-tutorial/</a>

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## Competitive Programming

- https://drive.google.com/drive/folders/1PWCeNBGukT1XtTSv5UKLobJ132\_I0BMd Google Drive folder with some introductory presentations
- <a href="https://codingbat.com/">https://codingbat.com/</a> Easy exercises to get you started
- <a href="https://usaco.guide/">https://usaco.guide/</a> The complete USACO guide
- <a href="https://codeforces.com/">https://codeforces.com/</a> Great CP website with a vibrant community

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## **Computer Graphics**

- https://www.blender.org/ The best 3D modeler
- <a href="https://krita.org/en/">https://krita.org/en/</a> Digital painting

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## Other Good Stuff

- https://github.com/Macmod/awesome-cs Another awesome list
- <a href="https://github.com/zamansky/awesome-cs-education">https://github.com/zamansky/awesome-cs-education</a> Yet another awesome list
- <a href="https://www.reddit.com/r/programmingmemes/">https://www.reddit.com/r/programmingmemes/</a> Memes! Memes!

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