Everything You Need To Ace Computer Science and Coding

By Workman Publishing

This Big Fat Notebook makes it all "sink in" with key concepts, mnemonic devices, definitions, diagrams, and doodles to help you understand computer science. **Teen Sports Games**

Star Wars Coding Projects

By Jon Woodcock

Guided by their favorite Star Wars characters, teens can learn to code games and use Scratch in this step -by-step visual guide. Each project consists of simple, numbered steps that are fully illustrated and easy to follow. **Teen Technology**

Coding from Scratch

By Rachel Ziter

Learn to create your own games, animation, presentations, and musical projects in no time at all with Coding from Scratch. **Teen Sports Games**

Choose any style of coding you want to learn and learn together with your friends. Choose what you want to make and go at your own pace.



TUESDAYS @ 5:00-6:00 pm

Slots are given on a first come, first served basis. OR you may bring your own laptop.





CODING RESOURCES

<u>https://code.org/</u> - Code.org provides learning materials specifically dedicated to increasing the rates of female and minority students entering computer science careers. Their free coding courses are designed for K-12 students, but can be useful to all ages. Start out with their quick Hour of Code tutorials, or build projects in lab courses.

<u>https://www.codecademy.com/</u> - It's perfect for learners who want to learn code online by getting practical, hands-on experience.

<u>http://thecodeplayer.com/</u> - A compilation of videobased online coding tutorials to help you walk through a process from start to finish. Good for learning code online with "smaller" projects/tasks one at a time.

<u>https://www.coursera.org/</u> - Coursera is one of the best places to learn to code for free, with its professional and versatile course options. The site is a large online course library where classes are taught by real university professors.

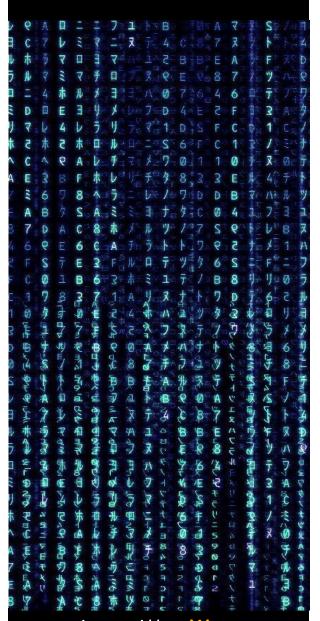
<u>http://www.edx.org/</u> - EdX is an open-source higher education program governed by MIT and Harvard, making it another high-caliber resource where you can learn to code for free online.

https://www.freecodecamp.org/ - This free online coding school teaches coding first through an established curriculum (approx. 800 hours total), then by giving you hands-on experience working on projects for nonprofits.

https://www.sololearn.com/- SoloLearn is a social platform where anyone can learn to code. It's different than other course providers because it's mobile-based: learn coding on the go, on any device. With bite-sized lessons, achievements to unlock and interactive quizzes, it makes learning to code fun, and it's free to download.

We encourage readers to be informed about the titles they are reading. <u>Commonsensemedia.org</u> is a great resource to help you decide if a book is right for you.

CODING



springville library

CODING FOR TEENS

In Real Life

By Cory Doctorow

Immersing herself in an online fantasy game, Anda confronts a difficult choice when she befriends a disadvantaged Chinese child who illegally collects rare items in the game and sells them to other players.

Teen Graphic In Real

Illuminae

By Amie Kaufman

The planet Kerenza is attacked, and Kady and Ezra find themselves on a space fleet fleeing the enemy, while their ship's artificial intelligence system and a deadly plague may be the end of them all. **Teen Kaufman**

Wires and Nerve

By Marissa Meyer

When rogue packs of wolf-hybrid soldiers threaten the tenuous alliance between Earth and Luna, android Iko joins up with a handsome royal guard to hunt down the rogue leader. **Teen Graphic Lunar**

The Square Root of Summer

By Harriet Hapgood Reuter

Gottie Oppenheimer, a seventeen-year-old physics prodigy, navigates grief, love, and disruptions in the space-time continuum in one very eventful summer.

Teen Reuter

<u>Bluescreen</u>

By Dan Wells

Los Angeles in 2050 is a city of open doors, as long as you have the right connections. That connection is a djinni--a smart device implanted right in a person's head. In a world where virtually everyone is online twenty-four hours a day, this connection is like oxygen--and a world like that presents plenty of opportunities for someone who knows how to manipulate it. Marisa Carneseca is one of those people. **Teen Wells**

Nonfiction:

<u>Girl Code: Gaming, Going Viral and Get-</u> ting it Done

By Andrea Gonzales

The teenage phenoms behind viral video game Tampon Run share the story of their experience at Girls Who Code and their rise to fame, plus a savvy look at starts-ups, women in tech, and the power of coding. This book includes bonus content to help you get

Modding for Minecraft

By Sarah Guthals

Modding allows players to customize Minecraft through code. The projects in this book teach your player how to modify the game by using code blocks to create mini games. **Teen Technology**

The Gamer's Guide to Coding By Gordon McComb

An interactive guide to coding explains how to test and play two dimensional computer games, providing step-by-step examples of how to program in Ja-

vaScript and share games on a computer or tablet. **Teen Technology**

Getting Started With Coding

By Camille McCue

Introduces the basics of coding through a series of projects that teach readers how to build their first programs and games. **Teen Technology**

Code Like a Girl: Rad Tech Projects

By Miriam Peskowitz

Coding is about creativity, self-expression, and telling your story. It's solving problems and being curious, building things, making the world a better place, and creating a future. It's about you: whoever you are, wherever you're at, whatever you want. **Teen Sports Games**

Learn To Program With Minecraft

By Craig Richardson

A kid-friendly introduction to programming in Python that teaches how to customize Minecraft. Readers follow short Python lessons, then write Python code to create instant visual results in the game. **Teen Technology**

Girls Who Code

By Reshma Saujani

From the founder of the Girls Who Code organization comes a graphically animated book bursting with dynamic artwork, down-to-earth explanations of coding principles, and real-life stories of girls and women working at places like Pixar and NASA. **Teen Technology**

Coding with Minecraft

By Al Sweigart

In Coding with Minecraft®, you'll create a virtual robot army with Lua, a programming language used by professional game developers. Step-by-step coding projects will show you how to write programs that automatically dig mines, collect materials, craft items, and build anything that you can imagine. **Teen Technology**

Code Your Own Games

By Max Wainewright

Introduces computer coding concepts using Scratch and provides step-by-step instructions for creating twenty games of varying coding difficulties. **Teen Sports Games**

Coding Projects in Scratch

By Jon Woodcock

A straightforward, visual guide that shows young learners how to build their own computer projects using Scratch, a popular free programming language, using fun graphics and easy-to-follow instructions. **Teen Technology**