

What is Computer Science and why is it important?

Computer Science touches everything in our lives...

There's no denying that computers and technology have become an integral part of how we live (think cell phones and online banking), work (think email and video conferencing), and play (think video games and online shopping), and can even influence our decisions (think digital ads, social media influencers, and recommender systems). This is why it's important that ALL people learn about Computer Science (CS) and how it affects the world and their lives. Especially, how can we learn to use computing tools to help and not harm?



...and impacts every career industry.

CS is used in every job field including medicine, music, finance, fashion, farming, sports, politics, entertainment, law, and so much more! And Artificial Intelligence (AI), a part of CS, is also impacting all fields. For example, doctors use computers and AI to diagnose patients or perform surgery, fashion designers create dresses using computer programs, and sports teams analyze game data to optimize performance. No matter what jobs are in the future, it's a pretty safe bet that CS will be an important skill to have.



And we're not talking about coding!

CS goes way beyond coding and software development. It's not only for kids who want to become programmers or work in tech. Just like learning to read a book or write an essay teaches kids important lifelong literacy skills, Computer Science can provide another way for kids to express themselves, explore new ideas, or pursue the things they care about whether it's helping those in need, making art, educating others, or inventing something entirely new!





“Computer Science is the study of computers and ALL the phenomena that arise around them.”

- Herbert Simon

✓ CS is...	X CS is <u>NOT</u>...
Solving real-world problems using computers	Learning to type/keyboard or use word processing software (like Microsoft Word) -- often called “educational technology” in school
Reading and writing (designing) computer programs	Creating spreadsheets (data entry) -- often called “digital literacy” in school
Reasoning about what computers can and can't do	Using social media
Useful for every career and industry	Only for programmers or tech workers
Creating video games or apps	Playing video games or using apps
A subject anyone can (and should) learn	Only for “smart” people or “nerds”
Important learning for all grades K-12	Only for high schoolers or people “good at” math or students who want to work in tech
Foundational to how AI is created and used	Separate from AI
for everyone!	Only for people of certain races, backgrounds, abilities, or gender.

“Computer literacy is one of the major prerequisites in almost every career. And I think it's so important for everybody to have those basics in order to have a successful career and future.”

- Sandra, Mother of a 6th grader and an 8th grader

