Life in code

Computer science is part of your daily life – even if you can't see it.

Game of Homes

Robotic vacuum cleaners, such as Dyson’s 360 Eye, clean your home by tracking the floor plan and memorizing their path so they don’t cover the same area twice. You can also program them by smartphone.

CS used: Algorithms, Artificial Intelligence, Software design

Thrash It Out

Players bend reality to their will when building entire worlds in video games such as No Man’s Sky and Minecraft. These games generate unique environments for each player using an algorithm-based method called procedural generation. Life-like video games, such as Call of Duty and Fallout 4, feature “intelligent” enemies that can respond, and learn from, player behavior and act unpredictably.

CS used: Programming, graphics software, artificial intelligence, client-server interaction

On the money

ATMs and apps give you fingertip access to cash and account balances without having to stand in line to see a bank teller.

CS used: Embedded system programming, databases, security, encryption

Anywhere, anytime

Online grocery stores, such as Amazon Prime and Netgrocer, can do same-day deliveries to your door and predict which products you’ll buy based on what you’ve put in your cart in the past.

CS used: Databases, web programming, artificial intelligence, machine learning, network security, encryption

Binge watch

Streaming media, such as Netflix and Hulu, allow you to watch a large assortment of films and TV shows on demand. According to a report from the international broadband company Sandvine, Netflix accounts for more than 37% of North American Internet traffic. What “streaming” services do you use?

CS used: Databases, user interface, compression algorithms

Creating anime

Anime, such as the network series Kabaneri of the Iron Fortress, is a bold visual style and innovative production methods. Character design, story telling, prominent in the 1990s with films, such as Ghost in the Shell and Princess Mononoke, combining traditional cel-based or cel. Animation with digital measurement. Coding and digital media are essential parts in anime. You can create your own anime through a wide range of software, such as Smith Micro’s Anime Studio Pro 11.

CS used: Programming, graphics software, animation, rendering, scattering, software design

Fitness friends

Fitness apps count calories, record your heartrate and track your daily activity on your smartphone. Some fitness apps, such as JEFIT, allow users to track their workout history. Help your friends track their workouts at the gym.

CS used: Databases, user interface

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According to the not-for-profit advocacy site Common Sense Media, American teens spend an average of 7 hours a day using social media, creating, sharing and exchanging information. How does your use stack up?

CS used: Databases, user interface, search, visualization, security models

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