

**Module: CS3012**

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# John Carmack

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John D. Carmack is an American computer programmer, video game developer and engineer. He co-founded the video game company id Software and was the lead programmer of its games Commander Keen, Wolfenstein 3D, Doom, Quake, and their sequels. Carmack has made numerous advancements in 3D computer graphics. He is well known for his Carmack's Reverse algorithm for shadow volumes. In 2013, he resigned from id to work at Oculus VR which is where he caught my attention.

## Early Childhood Life

Carmack was born in Shawnee Mission, Kansas. His father was a local television news reporter Stan Carmack. He grew up in Kansas City, where he became interested in computers at an early age. Carmack's first experience with video games was the famous Space Invaders in the arcades during a summer vacation as a child in 1978. The

notorious maze chase arcade game Pac-Man also left a strong impression on him. He said at the time that he admired Shigeru Miyamoto, the game developer.

When Carmack was 14, he broke into a school to help a group of children steal Apple II computers. In a James Bond like fashion, Carmack created a sticky substance of thermite mixed with Vaseline that melted through the windows. Unfortunately for him, an overweight friend got caught in the window and set off an alarm, alerting police.

Carmack was arrested, and sent for psychiatric evaluation, in which Carmack was described as “a brain on legs”. Carmack was then sentenced to a year in a juvenile home. He later attended the University of Missouri–Kansas City for two semesters before withdrawing to work as a freelance programmer.

## Career

Carmack was hired by Softdisk, a computer company based in Louisiana to work on Softdisk G-S, it was here that he met John Romero and other future key members of id Software such as Adrian Carmack. In 1990, while at Softdisk, Carmack and co created the first of the Commander Keen games. Afterwards, Carmack left Softdisk to co-found id Software. Carmack pioneered and popularized the use of many techniques in computer graphics, including adaptive tile refresh, ray casting, binary space partitioning, surface, and most famously Carmack’s Reverse (formally known as z-fail stencil shadows). In May 1992, id released Wolfenstein 3-D, a hit that popularized the genre of the first-person shooter(FPS). Players navigated a three-dimensional environment of rooms and hallways from a first-person perspective, wielding a weapon that appeared at the bottom of the screen. The game involved finding your way through maps while killing Nazi guards and attack dogs. Following this success, on December 10, 1993, id released Doom, a violent improvement upon Wolfenstein. Doom helped define the FPS genre and inspired numerous similar games, known as Doom clones. It is one of the most significant games in video game history, regarded by many as one of the greatest games of all time. It pioneered online distribution and technologies including 3D graphics and networked multiplayer gaming. Its graphic violence and hellish imagery also made it a subject of controversy. In more recent times, Carmack’s engines have been licensed for use in other influential first-person shooters such as Half-Life, Call of Duty and Medal of Honor.

## Personal Life

Carmack was so successful at id that by mid-1994 he had purchased 2 Ferraris; a 328 and a Ferrari Testarossa. In 1997, he famously gave away one of his Ferraris as a prize to Dennis Fong, the winner of a Quake tournament, in the process creating the first ever professional gamer. He met his wife Katherine Anna Kang at the 1997 QuakeCon when she visited id's offices. As a bet, Kang challenged Carmack to sponsor the first All Female Quake Tournament if she was able to produce a significant number of participants. Carmack predicted a maximum of 25 participants, but there were 1,500. Carmack and Kang married at the turn of the millenia, 1st January 2000. They had a son in 2004. Carmack is an atheist and avid pizza lover, two things I relate to. During his time at id Software, a medium pepperoni pizza would arrive for Carmack from Domino's Pizza almost every day, carried by the same delivery person for more than 15 years. Carmack had been such a regular customer that they continued to charge him 1995 prices.