



Future makers

Imagination + computers = no limits when it comes to a world of inspiration and passion

Sure, computer science is about numbers and code. But it's also about creativity. Skills in coding and computational thinking are essential to make movies, music, educational tools, performance art, and countless other real and virtual outcomes.

Miranda Emery, a software engineer at New Zealand company Serato, works on an Apple music-player app called Serato Pyro that mixes and transitions your songs just like a DJ would.

"It analyses the tracks and different sections of the song and then it matches between the outgoing song and the incoming song so that you get a smooth transition," she says.

Miranda is a long-time fan of ambient electronic music and loves bringing her computer science skills into play.

"I'm really into problem-solving and logical thinking, but there's also a strong creative side to it, where you have to be innovating and thinking of new ideas," she says. She also gets to spend her working day listening to music using the very app she helped develop.

Computers and software have transformed our world in recent years. Try and imagine today's movies without animation or CGI and you can see just how big an impact they've had.

They've certainly changed how James Hutson communicates scientific ideas at his company Explanovision, where he uses animation to explore our world. "It's about visual translation: I think about it as being like a storybook, so it's engaging and entertaining," he says.

James got to where he is in a roundabout way: studying computer science and law, then working on the science show *Beyond 2000*, taking it from television to the internet.

"I could write and research, and I had a fairly untapped art interest as I have always been an inveterate doodler," he says. These skills meant he could illustrate and animate stories like boring camera shots over shoulders as people typed into a computer.

"Computer science can be fun because it is a general problem but you need to latch some part of your passions onto it." – Bianca Nogrady