

Name: James Murray **Age:** 32

Background:

James grew up in Melbourne, Australia. At high school he studied Mathematics, Physics, Chemistry, English and French. Not sure what to study at university he started degrees in Science and Engineering.

He ended up completing a four year degree in Applied Mathematics. He then spent six months working for a mining company developing computer models for blasting in open cast mines. James returned to university to do a PhD in computational astrophysics.



What sort of work do you do?

I make computer models of flowing fluids. These fluids could be waves crashing on a beach, or the swirling gases round a newly formed star. I try to understand questions like how the planets form, what happens when gas falls into a black hole, and what a tidal wave looks like when it crashes on a coastline.

What do you like about your work?

It's wonderful having the freedom to work on whatever problem takes my fancy. One day I could be studying black holes, the next day I could be trying to make more realistic animations of water flowing from a wine glass.

What's the worst bit?

Sometimes I spend weeks or months on a problem only for it not to work. It's very hard to set the work aside and walk away, but often when you are thinking about something else the answer comes to you.

What do you want to do in the future?

I'm working with an expert in computer graphics and visualisation. We want to make better animations of flowing fluids for the movie industry.