

## **The Singularity**

**Paul Robinson**

Many computer scientists have suggested that not only is artificial intelligence possible, but that one it will become inevitable. Some have gone further and suggested that because computers can talk to each other in ways that the human brain can not that this intelligence will one day be greater than human intelligence. It can “scale” and grow in ways that are not confined by the size and shape of the human skull, creating many, many, many more virtual neurons than any brain could ever hold.

It is very hard for humans to imagine what an intelligence greater than human intelligence would look like (much as it is for a cockroach to imagine what it must be like to be a human), and so predictions about what would happen are hard to pin down.

Some people call it an “event horizon” beyond which we can know nothing. Some simply call it “The Singularity”, meaning that much like a black hole passing through it is irreversible and impossible to predict.

Many who believe the singularity is near believe that this intelligence will be able to create machines that have even greater intelligences at great speed. Much in the same way that humans have built computers that have doubled in power every 18 months for the last 30 years, scientists and philosophers believe after The Singularity computing power will be able to design more computing power that will double every few months and that within a few short years the entire sum of human intelligence on Earth will be just a fraction of the ability of artificial intelligence.

A few have suggested that brain implants that tap into this great intelligence will be available for humans that may make it possible to “augment” their intelligence (i.e. add to it). This would give a human vastly higher intellectual capacity than humans who do not have it.

Others have thought that such a great intelligence will consider humans as nothing more than pests, and like humans might treat a cockroach infestation, this intelligence may attempt to control our numbers or destroy us.

It is not clear that if such an intelligence exists, it will not quickly be able to ensure its own survival and make sure that it can never be turned off, so are we inventing a technology that will destroy us?

Others are more optimistic. They suggest a greater intelligence will be able to help answer great questions that humankind simply can't. Scientific questions that the greatest minds have struggled with will be quickly solved. New technologies beyond our imagination will be created. New forms of transport - perhaps even allowing for travel across star systems or galaxies - will be possible. Every area of science from medicine to economics will be effected, and each will receive knowledge that humanity would never have been able to amass alone.

Nobody knows for certain what will happen. Some don't even think that such an event is possible. But for those that do believe this will happen - and within our lifetimes - the consequences could be astonishing.

### **About Paul Robinson**

I studied Software Engineering at UMIST whilst being sponsored by GCHQ in Cheltenham. I took a year out during my studies and also did a year's work at a company that ultimately became Tiscali, working as a senior engineer on their Internet infrastructure.

I then spent a few years as a Technical Director of an IT services firm specialising in IT security. For a year after that role I worked freelance and did work in various locations including the Falkland Islands, before taking a position to work on a large EU-funded project at Manchester Metropolitan University as the IT Manager.

In 2006 I formed my own consultancy business and worked with dozens of businesses to help them develop their ideas for software products and services. During this time I caught the entrepreneur bug, and developed a few small side projects and other businesses of my own, using my knowledge of software development to build products and tools that many customers still enjoy and pay for the use of.

In early 2011 I became a founding director of a company called Stratajet, a start-up technology and software firm involved in the business jet industry. In my role there, I'm in charge of delivering some of the most complex software I have ever worked with, and in a business that has even more technical jargon than even the IT industry has.

I have also worked regularly with other entrepreneurs and programmers to help them bring their ideas to life, and am planning a series of iPhone and Android applications to be released over the next year as a series of side-projects.