

Hey, can you guess what I am, yet?

Ever thought you're too rational to be a real artist? Michael Cook meets the little robot that could

I think we can all agree that some things in life are designed to be kept separate. For instance, I try not to practice my weightlifting techniques at the same time as my lying-on-a-bed-of-nails party trick, for obvious reasons. My subscription of Meat Weekly, with free sample of bloody animal flesh, tends to get

they don't lend themselves well to art because they're always trying to make the lives of the humans that use them easier, and we don't always want that. Art's about struggle, not about paper-clips popping up and offering you assistance in venting your soul.

But this perception of computers could be about to change, thanks to a

artiste.

Dr. Colton has done much work in Computational Creativity, the field of getting machines to work in a way similar to humans when we create and invent, but The Fool is his most crowd-pleasing achievement, and it's easy to see why. The Fool doesn't just look at a photo and make a rough copy of it. The pictures you can see littering this page have been thought about in great detail. The materials, the brushstrokes, *everything*. The Fool isn't a glorified set of Photoshop filters. It's a machine that wants you to feel something when you look at its work.

"I'm not sure I'm creative myself yet," the project website states, in a slightly unsettling first-person tone, "I mainly work from digital images to produce artworks."

Now, that might not sound like much, but to fully understand The Fool's talent you have to learn a little about the other key members of the team - namely Maja Pantic and Michel Valstar.

Pantic and Valstar aren't strictly Creativity researchers. Their real strength lies in Machine Vision, the sort of technologies that can use images and film to analyse people and places. When they were brought into the project and taught The Fool how to understand what emotions people were feeling, the creative options really began to open up.

Late last year the team began to use their newfound knowledge of human emotion to make a series of paintings based on the happy, happy film *Amélie*. Over 220 portraits were made from various stills in the film, all capturing the main character in different kinds of emotional states. Each painting, as a result, is a unique blend of styles, media and colour. The full gallery, which is viewable online, is an extremely impressive end result.

With a new surge in confidence, The Painting Fool was ready to enter the big leagues and begin looking for that thing every child prodigy craves - appreciation for their art. And so in December last year Simon Colton and Michel Valstar took The Painting Fool to the annual Machine Intelligence Competition, sponsored by Electrolux and held on behalf of the British Computing Society in Cambridge. Though the third member of their team, Dr. Pantic, was too ill to attend, The Fool still performed to its best.

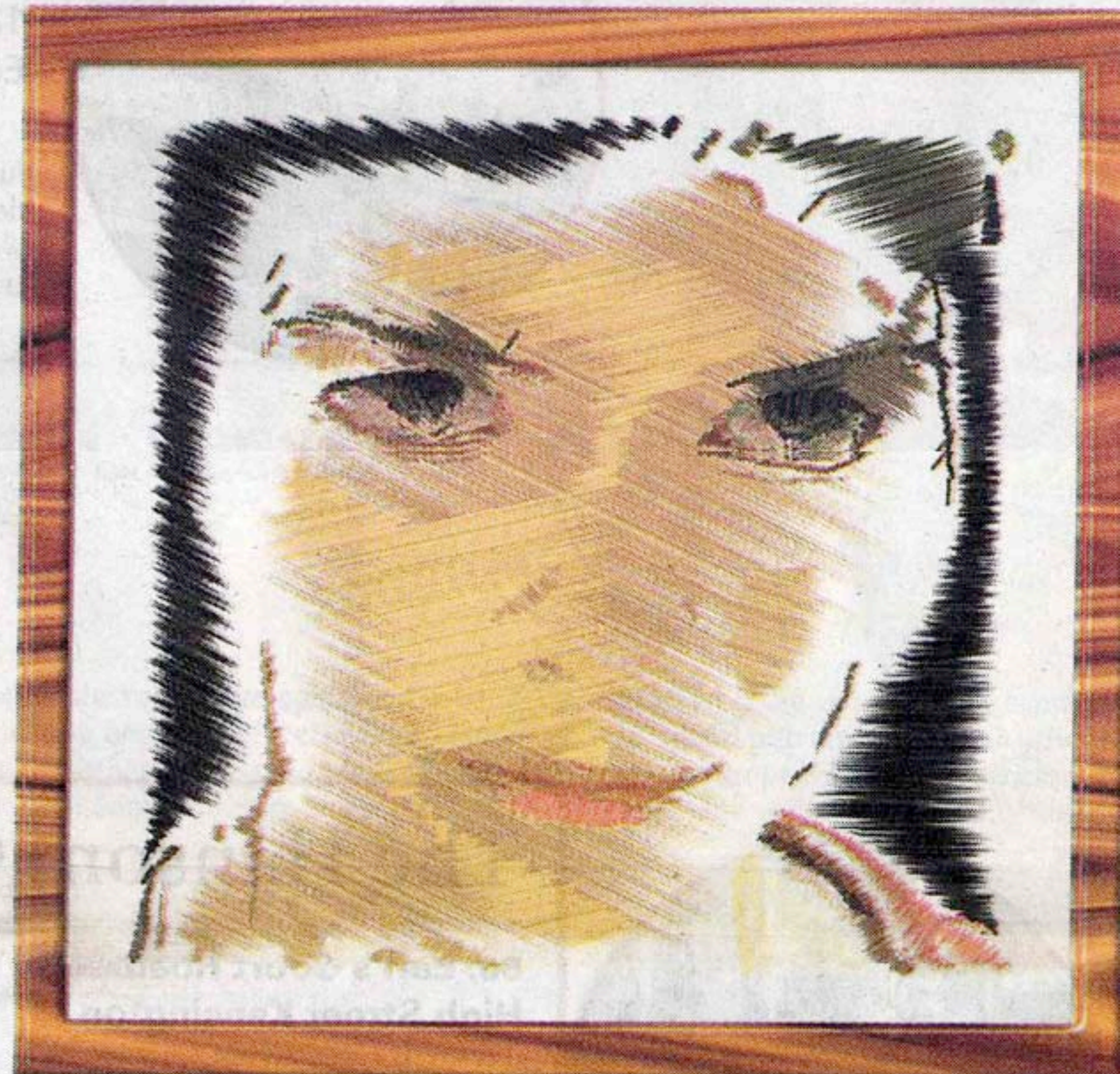
Despite technical difficulties, The Fool performed two live portraits in just fifteen minutes, one on Michel and a second on a member of the audience. The results, all of which are available

online, show just how well The Fool can now react to new subjects and settings. Deservedly, the team received a prize for the best live demonstration, giving a huge boost to the research and, of course, The Fool's needy artistic ego itself.

The story of the first cyber-Cezanne doesn't stop there, though. Colton and

the best opportunities yet to do so.

But there are many who feel that perhaps conquering it wouldn't be such a good idea. Certainly, there are those who feel uneasy about the idea of a robot talking to us, or asking us to do things, but those fears are generally borne of the notion that computers can't do anything remotely humanlike



mailed to my home address rather than my vegetarian best friend's. So when I'm relaxing in the leather armchairs of the Felix Office, beret in hand and brandy glass resting on my head, I have to fight hard to keep myself from blabbering inanely about all things Computer. I can confess it to you all - I'm a Computer Scientist.

At this point it's probably worthwhile listing everything that computers have ever done for the world of the arts, and they would be as follows: Adobe Illustrator, digital cameras, those funny little audio guide things you get at the V&A and that's about it. Even with these three, many people would argue they've not made much of a contribution. The Adobe suite in general seems to provide 'artists' with a quick shortcut to the end, digital cameras have killed the individuality and 'rough' feeling to film photography, and those audio guides are always narrated by someone irritating.

That's the problem with computers -

research project in Imperial's Department of Computing that's really beginning to come of age. In Imperial's glamorous Huxley building, past the XKCD comics pinned on doors and people swearing at monitors, a whole host of researchers, Professors and more are hiding the Department of Computing's Artificial Intelligence group.

Leading up a team of Machine Intelligence researchers, Dr. Simon Colton spends much of his time thinking about how to get machines thinking about how they themselves think. If that sounds complicated to you, imagine how it is for Dr. Colton's team. Nevertheless, in 2001 they gave birth to a very special baby. The Painting Fool was born.

The Painting Fool wasn't like many of the clever ideas born in the Computing department. It had something special, something that made it stand out. Other ideas just wanted to be clever. The Fool, however, wanted to become an

his team are already looking ahead to a far harder, but arguably more crucial milestone - making The Fool paint something from imagination alone.

"One of the tests of creativity is using imagination," Dr. Colton told the London Metro, "I want to get the computer to do this to create a new image." The little fella (lady?) himself is pretty eager, too.

"Imagination is not something that is easy to simulate. I'm currently working on painting scenes which don't exist. I hope to launch a new gallery of these images in early 2008. Watch this space..."

Why is it so much harder to do? It's partly because of the way such technologies work. At the moment, The Fool's strength comes from knowing how to analyse what it's seeing. But for humans, we don't have to be seeing something without eyes to commit it to paper. The world of free-form creativity is still unconquered, but Dr. Colton and his creation look like one of

The Painting Fool goes to show that this isn't the case.

Does this mean that we'll feel more at ease with the idea of artificial intelligence? Will seeing the softer side of the wires and chips make us more open to robotics? Or will this ghost from the machine actually make us even more worried that one day, we could have created something that at least *seems* to understand us all too well.

For my part, I think The Fool goes to show that computers and humans aren't all that different. The research makes me hopeful, too, that in the future computers could be put to use in ways that are currently unimaginable. But when I'm sitting in the Felix offices with my beret and my brandy, trying very hard to look reflective, I have to pretend otherwise.

The best you can do is decide for yourself. Find out more by heading to www.thepaintingfool.com

