

A team of scientists are developing a system to check dangerous rumours that appear in social media. Read the article to find out more.

Have you heard the rumour that gossip isn't really bad?

Maybe this is true but in the age of smartphones and social media, rumours that aren't checked and circulate instantly can have a very negative impact. This is why a project supported by the European Union and involving five universities – Sheffield, Warwick, King's College London, Saarland in Germany and MODUL University Vienna in Austria – is developing a 'lie detector' for checking social media. The three-year project is named after the mythological Greek Goddess of rumour – 'Pheme'. Lead researcher Dr Kalina Bontcheva, from the Department of Computer Science in the University of Sheffield's Faculty of Engineering, explains that the work began back in 2011 and 2012, looking at rumours circulating in the London riots.

A team analysed the tweets that were circulating. One rumour even said that animals had been released from London Zoo. 'They identified different kinds of misinformation, disinformation and speculation,' explains Dr Bontcheva, 'mostly concentrating on seven rumours which were pure disinformation.' Disinformation is rumour intended to deceive.

Automated rumour check

Dr Bontcheva started working in this field in 1996. She originally analysed news before moving into the world of social media. The current project aims to check rumours automatically in real time – the previous study had been all manually done. They are looking at four types of rumours – speculation, controversy, misinformation and disinformation – each with specific characteristics. For example says Dr Bontcheva, the area of 'speculation' concerns activities such as speculation on 'whether the Bank of England is going to raise interest rates. You don't know until this actually happens. The real challenge for us is how to recognise these things automatically and the different properties that they have over time.' The system will check where the information is coming from, for example from a journalist or from an instantly created Twitter account.

Healthcare rumour

It's not just news events that rumours build and circulate around. Healthcare professionals already take into account the internet search by patients of their symptoms, through official information sites or through unofficial patient forums. One of the research areas Dr Bontcheva is most excited by is the use for medical professionals who give their opinion about controversial issues – Alzheimer's disease, for example, and the debate in press, social media and in medical publications about this disease. The system the team are developing would help people understand medical rumours. Is a certain kind of information agreeing with what most doctors say? Or is it not? It doesn't make it wrong says Dr Bontcheva. But it helps doctors advise on how much we can trust this information.

While the internet breeds ‘viral’ information and misinformation, technology also develops new technological ‘antibodies’ to help cure the effects of this misinformation. ‘That idea of “antibodies” is a nice way of looking at it,’ says Dr Bontcheva, reflecting on how this app may help when we worry

ourselves unnecessarily. ‘It is quite easy to convince yourself that you have got a particular disease, whatever it seems to be.’ The healthcare part of the project will be tested by the Institute of Psychiatry at King’s College London.

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