PHEME aims to model, identify, and verify rumours in social media…

Consortium

- The University of Sheffield (USFD)
- Universitaet des Saarlandes (USAAR)
- MODUL University Vienna (MOD)
- Ontotext AD (ONTO)
- ATOS Spain SA (ATOS)
- Kings College London (KCL)
- iHUB Ltd (USH)
- SwissInfo.ch (SWI)
- The University of Warwick (UWAR)

Duration

- 1st January 2014 – 31st December 2016

Thematic Priority/Domain

- FP7-ICT-2013-10 | Objective ICT-2013.4.1 Content analytics and language technologies

Community Contribution

- EUR 2,916,000

HTTP://WWW.PHEME.EU

PhemeEU

Project Coordinator

Dr. Kalina Bontcheva
K.Bontcheva@sheffield.ac.uk

Department of Computer Science
University of Sheffield
Regent Court, 211 Portobello
Sheffield, S1 4DP
UK

Tel +44 114 222 1800
Fax +44 114 222 1810

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PHEME

Computing Veracity across Media, Languages, and Social Networks

HTTP://WWW.PHEME.EU

About PHEME

PHEME aims to model, identify, and verify rumours , as they spread in social media and online networks

- *Automatic cross-media rumour detection*
- *A priori knowledge from Linked Open Data*
- *Model who, why, and how spreads rumours*
- *Visualize rumour dynamics over time*

Social networks have been used to spread accusations that Barack Obama was Muslim, allege vote-rigging in Kenyan elections and claim that the animals were set free from London Zoo during the 2012 riots. In all of these cases – and many more – an ability to quickly verify information and track its provenance would enable journalists, government, emergency services, health agencies and the private sector to respond more effectively.

The PHEME project aims to build new methods that will automatically verify online rumours as they spread around the globe. We coined the term phemes to describe internet memes, which are enhanced with truthfulness information

PHEME will classify online rumours into four types: speculation – such as whether interest rates might rise; controversy – as over the MMR vaccine in the UK; misinformation, where something untrue is spread unwittingly; and disinformation, where it's done with malicious intent.

The system will also automatically categorise sources to assess their authority, such as news outlets, individual journalists, experts, potential eye witnesses, members of the public or automated 'bots'. It will also look for a history and background, to help spot where Twitter accounts have been created purely to spread false information.

We will search for sources that corroborate or deny the information, and plot how the conversations on social networks evolve, using all of this information to assess whether it is true or false. The results will be displayed to the user in a visual dashboard, to enable them to easily see whether a rumour is taking hold.

The results will be evaluated in two real-world domains. For digital journalism, our models will be tested by the online arm of the Swiss Broadcasting Corporation, swissinfo.ch. For healthcare, the Institute of Psychiatry at Kings College London, will look at online rumours related to new recreational drugs and then find out how quickly these feature in patients' medical records and discussions with doctors.

The techniques will be generic with many business applications, e.g. brand and reputation management, customer relationship management, semantic search and knowledge management. In addition to its high commercial relevance, PHEME will also benefit society and citizens by enabling government organisations to keep track of and react to rumours spreading online.