



Our Team



- **Organizations**

- **University of Edinburgh**

- School of Informatics, Human Communication Research Centre

- **University of Southern California**

- Computer Science Department

- **Team members**

- **Victor Lavrenko (Edinburgh)**

- **Anton Leuski (USC)**

- **Steve Renals (Edinburgh)**

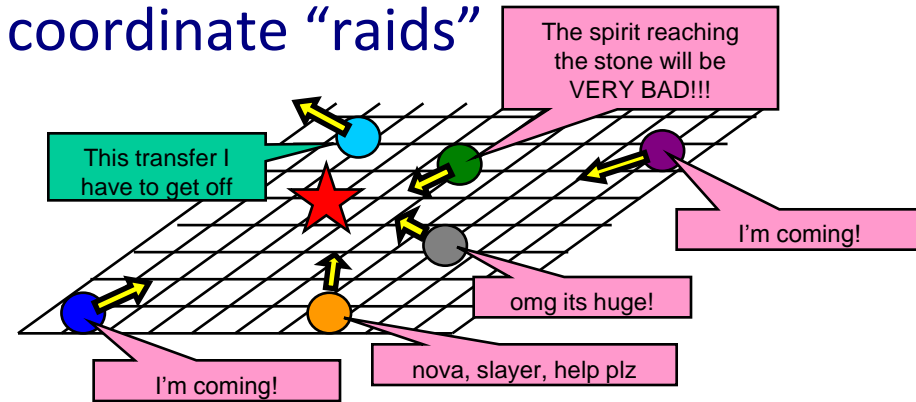
- **David Traum (USC)**

- **Carsten Eickhoff (Edinburgh)**

- **Dusan Jan (USC)**

VW Research Interests

- Connect what people say with what they do
- Detect activities from the content of communications
 - players use messages to plan, coordinate “raids”
 - monitor messages to detect:
 - are players planning a raid?
 - was X involved, or a bystander?
 - the roles of individuals in a raid
- RW parallel: 2005 Paris riots
 - coordinated via text messages
- Chatter-based detection is possible:
 - raid at a given time/location: 10% error
 - individual involvement in raid: 30% error



Anton Leuski and Victor Lavrenko. “Tracking dragon-hunters with language models”.
 In *Proceedings of the 15th Conference on Information and Knowledge Management (CIKM)*, Arlington, VA, November 2006.



Our capabilities



Analysis of Message Content

- **University of Edinburgh**
 - topic tracking, event detection
 - speech recognition, prosody (anger, stress, fatigue, ...)
 - linguistic processing: NER, semantics
 - machine translation
- **University of Southern California**
 - text clustering and classification
 - information organization and visualization
 - dialogue processing and management
 - culture specific behaviour analysis
 - integrated virtual humans in virtual worlds (Second Life & ActiveWorlds)



Teaming Opportunities

- We provide enabling technology
 - analysis of the content of messages
 - ... and its connection with time, location, action, role, etc.
 - ... and visualization of these links
 - additional source of evidence for your task?
- Capabilities we lack:
 - social network analysis
 - analysis of in-game dynamics
 - psychological analysis and modelling
- Also looking for:
 - data: chat logs with activity, role annotations
 - applications in other VW/RW domains



Contact Information



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