

# Dr. Pierre Andrews

Email: pierre.andrews@gmail.com

Age: 31

Nationalities: French, British.

## Education

### Ph.D. Computer Science

The University of York  
Unilever R&D  
United Kingdom

October 2004 – December 2008

The research performed during my Ph.D. thesis aimed at developing techniques for achieving persuasive dialogue between a human user and the computer in collaboration with Unilever R&D. In particular, it focused on the formalisation of argumentation for dialogue planning in combination with a novel framework for dialogue management to improve both the reactivity of the dialogue system and its persuasiveness.

### Engineering Degree (B.Sc.+M.Sc.), Computer Science

Ecole Polytechnique Fédérale de Lausanne

October 1999 – March 2004

Switzerland

Master Thesis: Semantic Topic Extraction and Segmentation for Efficient Document Visualization.

### French Scientific Baccalauréat

Collège du Léman

July 1998

Switzerland

## Work

### Research Fellow

University of Trento

## Experience

March 2009 – present

Trento, Italy

- Worked on interactive intelligent interfaces; combining research in human-computer interaction, natural language processing, machine learning and knowledge modeling.
- Co-managed the Knowledge and Diversity (Knowdive) research unit contributions to the INSEMTIVES EU FP7 project (2009–present);
  - Developed a semantic annotation system,
  - Developed a sense induction algorithm and evaluation methodology within folksonomies,
  - Researched the issues of semantic tagging in folksonomies,
  - Wrote seven deliverables and six peer-reviewed publications.
- Managed the Knowdive research unit contributions to the GLOCAL EU FP7 project (2010–present);
  - Developed a semantic event management system,
  - Developed an Android event management application,
  - Researched user motivations for media creation and archival,
  - Wrote three deliverables and two peer-reviewed publications.
- Co-supervised three Ph.D. students. One already completed his Ph.D. successfully.

## Teaching Assistant

The University of York – Department of  
Computer Science

October 2008 – November 2008

York, United Kingdom

Taught the course Advanced Java Programming Concepts for Msc. IT and Msc. Computing; introducing master students to programming principles and object oriented programming in Java.

## Research Assistant

Ecole Polytechnique Fédérale de Lausanne

June – October 2003

Lausanne, Switzerland

Wrote a state of the art deliverable about "Document processing and visualization techniques" for the European Network of Excellence in Text Mining and its applications in Statistics (NEMIS) with Dr. Martin Rajman.

## Open Source Development

2003 – present

62 plugins in PHP, XHTML/HTML5 and Javascript for SPIP; 22 Greasemonkey/Firefox extensions ;

## Java Programmer

Cogito-Info

July – October 2002

Neuchatel, Switzerland

Developed an SMS communication server with JBoss server framework and the Java Messaging System (JMS).

## Java Developer (internship)

European Organization for Nuclear

June – August 1998

Research

Geneva, Switzerland

Development of a Java Swing GUI managing the quality assessment workflow for the CMS detector's components within the LHC particle detector's.

## Technical Specialities

**Research:** Natural Language Processing, Human-Computer Interaction, Semantic Web, Artificial Intelligence.

**Technologies:** Java: JSP/Servlet(J2EE), Swing, Android, Hibernate, Tomcat, Hadoop, Spring; MySQL, PostgreSQL, SQLite; SPIP, AJAX, Greasemonkey; JSON/XML Rest APIs, RDF, N3.

**Programming Languages:** Java, JavaScript, PHP, XHTML/HTML5, Perl, Lisp, Prolog, SQL.

## Other Teaching Experience

Demonstrated for the following courses:

**Natural Language Processing** 2005 – 2006 The University Of York.

**Introduction to Databases** 2001 EPFL.

**Introduction to Programming** (Java) 2001 – 2002 EPFL.

**Object Oriented Programming** (OOP, SmallTalk, Java) 2001 EPFL.

## Languages

French (*native*), English (*fluent*), Italian (*fluent*).

## Publications

### In Review

#### **System Personality and Persuasion in Human-Computer Dialogue**

Pierre Andrews

ACM TRANSACTIONS ON INTERACTIVE INTELLIGENT SYSTEMS, special issue on Personalization and Persuasion – accepted with minor revisions

### 2011

#### **A Classification of Semantic Annotation Systems**

Pierre Andrews, Ilya Zaihrayeu, Juan Pane

THE SEMANTIC WEB JOURNAL – IOS Press, to appear

#### **Clues of Personal Events in Online Photo Sharing**

Pierre Andrews, Javier Paniagua and Fausto Giunchiglia

DERIVE 2011 – Detection, Representation, and Exploitation of Events in the Semantic Web Workshop – 10th International Semantic Web Conference 2011

#### **Adopting Semantic Annotation Systems for Corporate Portal Management – the Telefonica Case Study**

Ilya Zaihrayeu, German Toro del Valle, Juan Pane, Pierre Andrews

7th International Conference on Semantic Systems

#### **Supporting Semantic Annotations in Flickr**

Pierre Andrews, Juan Pane, Ilya Zaihrayeu and Aliaxandr Autayeu

IEEE International Conference on Intelligent Computer Communication and Processing

#### **Semantic Annotation of Images on Flickr**

Pierre Andrews, Sergey Kanshin, Juan Pane, and Ilya Zaihrayeu

8th Extended Semantic Web Conference, Springer LNCS

#### **Semantic Disambiguation in Folksonomy; a Case Study**

Pierre Andrews, Juan Pane and Ilya Zaihrayeu

Advanced Language Technologies for Digital Libraries – Springer LNCS Hot Topic subline

#### **Sense Induction in Folksonomies**

Pierre Andrews, Juan Pane and Ilya Zaihrayeu

Workshop on Discovering Meaning On the Go in Large Heterogeneous Data – IJCAI'11

#### **Extending Conversational Agents for Task-Oriented Human-Computer Dialogue**

Pierre Andrews and Silvia Quarteroni

Conversational Agents and Natural Language Interaction; Techniques and Effective Practices

IGI Global Publishers

### 2010

#### **Lightweight Parsing of Classifications into Lightweight Ontologies**

Aliaksandr Autayeu, Fausto Giunchiglia, and Pierre Andrews

European Conference on Research and Advanced Technology for Digital Libraries (ECDL)

#### **Keynote @ Webcentives 2010**

Pierre Andrews

Incentives and Motivation for Web-Based Collaboration (Webcentives)

9th International Conference on the Design of Cooperative Systems

#### **Media Aggregation via Events**

Fausto Giunchiglia, Pierre Andrews, Gaia Trecarichi, and Ronald Chenu-Abente

1st International Workshop EVENTS 2010 at The 6th Hellenic Conference on Artificial Intelligence

#### **Recommendations for Better Quality Ontology Matching Evaluations**

Aliaksandr Autayeu, Vincenzo Maltese and Pierre Andrews

In proceedings of the AISB Workshop on Matching and Meaning

2009

**Best Practices for Ontology Matching Tools Evaluation**

Aliaksandr Autayeu, Vincenzo Maltese, and Pierre Andrews

ISWC Ontology Matching Workshop

**A SVM Cascade for Agreement/Disagreement Classification**

Pierre Andrews and Suresh Manandhar

Journal Traitement Automatique des Langues, special issue on Machine Learning for NLP, TAL 50:3

**Lightweight Parsing of Natural Language Metadata**

Aliaksandr Autayeu, Fausto Giunchiglia and Pierre Andrews

In Natural Language Processing for Digital Libraries (NLP4DL) Workshop

**Measure Of Belief Change as an Evaluation of Persuasion**

Pierre Andrews and Suresh Manandhar

Symposium on Persuasive Technology and Digital Behaviour Intervention – AISB'09

2008

**Proceedings of the 2nd York Doctorial Symposium**

Pierre Andrews and Tom Lampert, editors

Technical Report YCS-2008-434 by the Department of Computer Science, University of York

**Argumentative Human Computer Dialogue for Automated Persuasion**

Pierre Andrews, Suresh Manandhar and Marco De Boni

SIGdial –ACL

2006

**Integrating Emotions in Persuasive Dialogue: A Multi-Layer Reasoning Framework**

Pierre Andrews, Suresh Manandhar and Marco De Boni

FLAIRS

**Persuasive Argumentation in Human Computer Dialogue**

Pierre Andrews and Marco De Boni and Suresh Manandhar

AAAI Spring Symposia

**SPIP Memento**

Pierre Andrews and Vincent Caron

Eyrolles publications

2004

**Semantic Topic Extraction and Segmentation for Efficient Document Visualization**

Pierre Andrews

EPFL Technical Report IC/2004/68

**Document Processing and Visualization Techniques**

Martin Rajman, Martin Vesely and Pierre Andrews

NEMIS Network of Excellence deliverable