Louise Guthrie

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EDUCATION

New Mexico State University, Las Cruces New Mexico, Ph.D. Computer Science 1986

University of Pittsburgh, Pittsburgh, Pennsylvania, ABD Mathematics

West Virginia University, M.S. Mathematics,

California University, California Pa, B.S. Mathematics / Secondary Education

EXPERIENCE

Research Consultant – DARPA contract with IHMC, Ocala Florida, November 2012 - present
Consultant investigator for a DARPA project investigating anomalous statements or beliefs of participants in a dialogue or forum discussion.

Partner - GTW Partners, Oxford, UK - July 2011 – October 2013
Co-Principal investigator for a MOD project investigating leadership, influence and expertise on web forums and blogs.

Visiting Fellow, Oxford Internet Institute, November 2009-November 2010

Senior Lecturer, University of Sheffield   2000- November, 2009
Computer Science Department; Teaching has included: Object Oriented Programming, Symbolic reasoning, Automata Theory, Pattern processing, Text Processing; Research has included text classification, and anomaly detection.

Assistant Professor and lecturer, University of Texas at El Paso   1997-2000
Mathematics lecturer 1997-1998; Taught business math, pre-calculus, calculus, and liberal arts math. Assistant Professor in Management and Information systems 1998-2000. Funded research listed below.

Lead Scientist, Text Processing, Lockheed Martin   1994-1997
Management and Data Systems division: Responsibility included leading a team to develop an information extraction system.   competing in the DARPA information extraction; worked with Business development on the placement of research funding.

Associate Director , Computing Research Laboratory, New Mexico State University   1993-1994,
Developed the first named entity recognizers for the TIPSTER and MUC programs, developed robust classifiers for topic classification in the TIPSTER program

Research Associate, Computing Research Laboratory, New Mexico State University   1990-1994
Developed the the first first techniques to extract meaning from electronic dictionaries. Results were used to automatically create lexicons for machine translation,

Co-Founder RTR software
Developed the IBM version of the Dow Jones Market Analyzer; worked with Business development to bring in business

Assistant Professor of Computer Science, Texas International Education Consortium, Austin, TX. Cooperative Program with Institute Teknologi Mara, Shah Alam, Malaysia.   1986-1988
Mathematics Lecturer at first, then set up the computer science and computer engineering programs and lectured in computer science.

Post Doctoral Associate, Computing Research Laboratory, New Mexico State University   1985-1986
Developed the the first techniques for using parallel parsing for machine translation

Mathematic Lecturer at El Paso Community College El Paso   1975-1983
Taught pre-calculus, calculus, business math, statistics, math for liberal arts students

SELECTED PUBLICATIONS

Guthrie, D., Guthrie, L., and Wilks, Y. (2009)
"What is a "full statistical model" of a language and are there short cuts to it?".
In *After Half a Century of Slavonic Natural Language Processing*, Eds D. Hilavackova, A. Horak, K. Osolsobe, P. Rychly, pp. 45-56
Jabbari, S., Guthrie, L. (2009)
"A Probabilistic Model of Context Applied to the Lexical Substitution Task".
In Proceedings of the 12th International Conference on Text, Speech and Dialogue conference (TSD 09), Pilzen, Czech Republic

Liu, W.., Guthrie, L. (2009)
"Chinese Pinyin Text Conversion on Segmented Text".
In Proceedings of the 12th International Conference on Text, Speech and Dialogue conference (TSD 09), Pilzen, Czech Republic pp 427-436

Jabbari, S. & Allison, B., and Guthrie, L. (2008)
"An Empirical Bayesian Method for Detecting Out Of Context Words".
In Proceedings TSD'08, Brno, Czech Republic

Allison, B., & Guthrie, L. (2008)
"Authorship Attribution of E-Mail: Comparing Classifiers Over a New Corpus for Evaluation"
In Proceedings LREC'08, Marrakech, Morocco

Jabbari, S., Allison, B., and Guthrie, L., (2008)
"Using a Probabilistic Model of Context to Detect Word Obfuscation".
In Proceedings LREC'08, Marrakech, Morocco

Liu, W., Allison, B., and Guthrie, L., (2008)
"Professor or screaming beast? Detecting Anomalous Words in Chinese"
In Proceedings LREC'08, Marrakech, Morocco

Guthrie, D., Guthrie, L., Allison, B., and Wilks, Y., (2007)
"Unsupervised Anomaly Detection"
In Proceedings IJCAI'07, Hyderbad, India, pp. 1624-1628

Jabbari, S., Allison, B., Guthrie, D. & Guthrie, L. (2006)
"Towards the Orwellian Nightmare: Separation of Business and Personal Emails"
In Proceedings of 21st international Conference for Computational Linguistics and
44th Annual meeting of Association for Computational Linguistics, pp. 407-411
Sydney Australia, July 2006

Allison, B., Guthrie, D.& Guthrie, L. (2006)
"Another Look at the Data Sparsity Problem"
In Proceedings of the Ninth International Conference on Text, Speech and Dialogue
Brno, Czech Republic September, 2006

David Guthrie, Ben Allison, Wei Liu, Louise Guthrie, Yorick Wilks (2006)
"A Closer Look at Skip-gram Modelling"
In Proceedings of the Fifth international Conference on Language Resources and
Evaluation, pp. 1222-1225, Genoa, Italy May 200Louise Guthrie, Wei Liu, Yunqing Xia, (2005)

INVITED TALKS

The 12th International Test Speech and Dialogue Conference in Pilzen, Czech Republic, September 2009
Keynote talk: The Semantics of Semantics

The 9th Test Speech and Dialogue Conference in Brno, Czech Republic, September 2006
Keynote talk: Anomaly detection in text

Prague Worksop on Techtogramatic annotation
Invited Talk: Data Sparsity and Annotation; December 2004

Prague Workshop on Lexico-Semantic Classification and tagging
Invited talk: Semantic Annotation of Nouns December 8-9 2003
Panel Member: The WordNet, other sources of knowledge and their organization

FUNDED RESEARCH

Distinguishing the expert and non-expert in text - GTW partners £145 - July 2011-2012 (co-PI)

REVEAL II   The identification of anomalous segments in text on a large scale
 (2008-2010), MOD funded University of Sheffield, PI
Budget amount about £300,000.

CLUE : Contextual Learning for detecting Unexpexted Events (2006-2008)
MOD funded; University of Sheffield, PI
Budget amount: £360,854

PEEC : Partitioning the Enron Email Corpus (A proposal to annotate personal and business emails) (2006-2007)
MOD funded , University of Sheffield, PI
Budget amount: £119, 879

ABRAXAS : Automating Ontology Learning for the Semantic Web (2004-2007)
EPSRC funded, University of Sheffield, co-PI
Budget amount: £164,614, (co-PI) (about
COMPANIONS : Intelligent, Persistent, Personalised Multimodal Interfaces to the Internet (2006-2010)
EU funded, Co-ordinator: University of Sheffield, (co-PI)
University of Sheffield Budget amount - £1,599,965 (total funding amount €10,178,219) (about $3,000,000 for Sheffield, and about $15, 000,000 overall)

REVEAL   The identification of anamalous segments in text on a large scale
 (2005-2007)
MOD funded; University of Sheffield (co- PI)
Budget amount: £149,894

Genre Identification Development and Expansion (2000 - 2001)
Department of Defense; New Contract at University of Texas at El Paso (PI)
Budget amount: $75K

Content Representation Assessment (2000 - 2001)
Department of Defense; New Contract at University of Texas at El Paso (PI)
Budget amount: $150K

Consulting on LDRD Project (1997)
Sandia National Laboratories; Computing Research Laboratory , New
Mexico State University (PI)
Budget amount: $15K)

Text Classification (1995-1996)
ARPA: Lockheed Martin Management and Data Systems, (PI)
Budget amount: $50K

Lockheed Martin TIPSTER Phase II (1994-1996)
ARPA: Lockheed Martin Management and Data Systems, (PI)
Budget amount: $2million

Cibola/Oleada: Translator Support Systems (1994-1998)
DOD; Computing Research Laboratory, New Mexico State University (consultant)
Budget amount: $900K

Tipster II: Cervantes (1994-1996)
DARPA; Computing Research Laboratory, New Mexico State University (consultant)
Budget amount: $400K)

CRL Translation Support (1994-1995)
IRS: Computing Research Laboratory, New Mexico State University (PI)
Budget amount: $100K

Improvement of Word Sense Info. in the English Word Dict. II (1993-1994)
EDR; Computing Research Laboratory, New Mexico State University (PI)
Budget amount: $75K

A Lexical Knowledge Base from a Machine Readable Dictionary (1991-1995)
NSF; CRL contract 134 (co-PI)
Budget amount: $900K

DARPA MT Phase 2 Knowledged-Based Machine Translation Project (1992-1994)
DARPA; Computing Research Laboratory, New Mexico State University (consultant- automatic
construction of lexicons)
Budget amount: $600K

EDR Dictionary Evaluation (1992-1994)
EDR; Computing Research Laboratory, New Mexico State University (co-PI)
Budget amount: $100K.

TIPSTER Extraction Project (1991-1994)
DARPA; Computing Research Laboratory, New Mexico State University (consultant - all
aspects)
Budget amount: $800K

Consortium for Lexical Research (1991-1993)
DARPA: Computing Research Laboratory, New Mexico State University (co-PI)
Budget amount: $100K

Knowledge-based Machine Translation Research Project: Site 2 (1991-1992)
DARPA; Computing Research Laboratory, New Mexico State University (consultant- automatic construction of lexicons)
Budget amount: $400K

General Operating System Consultant (1988-1990)
US West Adv. Technologies: Computing Research Laboratory, New Mexico State University (co-PI)
 Budget amount: $200K