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# egon w. stemle

Egon Stemle is a Cognitive Scientist: he studies skills like perception, thinking, learning, motor function, and language by combining the humanistic and analytical methods of the arts and the formal sciences. His research focus within this relatively new 'inter-discipline' lies in the area where Computational Linguistics and Artificial Intelligence converge. He is working on computer aided fabrication of ontologies from large document repositories, the technological feasibility thereof and the utilization of cross-linked structured data in applications, and on tools for editing, processing, and annotating linguistic data. His driving force is the question why humans handle incomplete and – more often than not – inconsistent structured concepts just fine, whereas computational processes are often of little avail or fail completely.

### Education

since 02.2006 MSc in Cognitive Science, University of Osnabrück, Germany.

(ongoing) Majors: Linguistics and Computational Linguistics and Artificial Intelligence, Study Project: ASADO (Analysis and Structure of Aviation Documents), [http://www.cogsci.uni-osnabrueck.

de/~ASADO].

03.2002 -Semester abroad, ILLC (Institute for Logic, Language and Computation), University

-09.2002of Amsterdam, The Netherlands.

BSc in Cognitive Science, University of Osnabrück, Germany. 10.2000 -

-01.2006

12.1998 -**Apprenticeship as Travel Agent**, WORLDWIDE Touristik, Nürnberg, Germany.

-07.2000

**Abitur**, Sigmund-Schuckert-Gymnasium, Nürnberg, Germany. 06.1997

#### Master's Thesis

Hybrid Sweeping: Streamlined Perceptual Structured-Text Refinement title

Prof. Dr. Stefan Evert and Prof. Dr. Peter König supervisors

Development of a perceptually driven content extraction architecture for Web pages - exemdescription

plified by a Web page cleaning system.

#### Bachelor's Thesis

A Flexible Integration of CL Techniques for Analyzing Linguistic Units in Large Doc-

ument Repositories

PD Petra Ludewig and PD Helmar Gust supervisors

The basic computational linguistic processing stages from raw text documents towards a description

linguistically enriched annotation for documents are presented.

## Research and Professional Experience

2008 **Freelancer**, *ontoprise GmbH* [http://www.ontoprise.de].

since 04.2008 **Project Member**, *GoodGaze* [http://www.goodgaze.com].

10.2006 – Research Participant, DAAD funded research project (Project-linked exchange of academics and scientists, PPP), Collaboration between the Institute of Cognitive Science, U. Osnabrück, Germany, the CNRS UMR 8163 (Savoirs, Textes, Langages), U. of Lille (III), France, and the Departament de Traducció i Filologia, U. Barcelona (Pompeu Fabra), Spain, Reference to Abstract Objects in Natural Language (OntoRef) [http://parles.upf.es/glif/pub/abstract/index.html].

04.2006 – **Research Assistant**, *Institute of Applied Informatics and Formal Description Meth-*04.2008 ods, *University of Karlsruhe*, *Germany*, Knowledge Management Research Group,
[http://www.aifb.uni-karlsruhe.de/Forschungsgruppen/WBS/english].

Maintenance and development of software and scientific counsel; e.g. evaluating CL tools for OmniFind+UIMA and hooking them together.

08.2004 – Research Participant, Cooperation between the Universities of Osnabrück and Hildesheim, and the Aircraft Manufacturer AIRBUS, Project to research Methodologies and Technologies to analyze and structure the huge Amount of Documentation produced during Aircraft Construction.

08.2003 – **Student Assistant**, *Institute of Cognitive Science, University of Osnabrück, Ger-* 12.2003 — many, Artificial Intelligence Research Group, [http://www.cogsci.uni-osnabrueck.de/~ai/milca.html].

Maintenance and development of software for the MiLCA (Media intensive learning units for courses in computational linguistics) project.

since 10.2001 **System Administrator**, *Institute of Cognitive Science, University of Osnabrück, Germany.* 

Maintenance of computer hardware and software, user support, server administration, configuration of a fully automated installation system for Windows, Linux and OS X.

11.1997 – **Alternative Civilian Service**, Alten-, Wohn- und Pflegeheim Reichelsdorf, and Fahr-- 11.1998 dienst für Behinderte gGmbH; Nürnberg, Germany.

## Teaching Experience

10.2003 – **Artificial Intelligence Tutor**, *Methods of Artificial Intelligence*, Second year Cognitive Science class, Institute of Cognitive Science, University of Osnabrück.

(every other semester) Weekly tutoring of the lecture material, assessment of programming assignments, homework corrections, and exam preparation.

04.2003 – **Computational Linguistics Tutor**, *Introduction to Computational Linguistics*, First year Cognitive Science class, Institute of Cognitive Science, University of Osnabrück.

(every other semester) Weekly tutoring of the lecture material, preparation and assessment of programming assignments, homework corrections, and exam preparation.

10.2002 – Theoretical Neuroscience Tutor, Introduction to Theoretical Neuroscience, Second
 - 02.2003 year Cognitive Science class, Institute of Cognitive Science, University of Osnabrück.
 Weekly tutoring of the lecture material, homework corrections.

10.2001 – **Computer Science Tutor**, *Algorithms*, First year Computer Science class, Computer – 02.2002 Science Department, University of Osnabrück.

Weekly oral assessment of 10 2-people groups and homework corrections.

## Workshops and Conferences

09.2006 **Student Worker at OTT06**, *Workshop*, jointly organized by the Institute of Cognitive Science at the University of Osnabrück and the project C2 of the distributed DFG-research group Text Technological Modelling of Information, [http://www.cogsci.uni-osnabrueck.de/~ott06].

Ontologies in Text Technology: Approaches to Extract Semantic Knowledge from Syntactic Information.

O6.2006 **Student Worker at QITL-2**, *Workshop*, organized by the Computational Linguistics Group at the Institute of Cognitive Science, [http://www.cogsci.uni-osnabrueck.de/~qitl]. Second Workshop on Quantitative Investigations in Theoretical Linguistics.

09.2003 **Student Worker at EuroCogSci 2003**, *Conference*, jointly organized by the Cognitive Science Society and the German Cognitive Science Society, [http://www.eurocogsci03.uni-osnabrueck.de].

First European Cognitive Science Meeting.

#### **Publications**

09.2007 Daniel Bauer, Judith Degen, Xiaoye Deng, Priska Herger, Jan Gasthaus, Eugenie Giesbrecht, Lina Jansen, Christin Kalina, Thorben Krüger, Robert Märtin, Martin Schmidt, Simon Scholler, Johannes Steger, Egon Stemle, and Stefan Evert, FIASCO: Filtering the internet by automatic subtree classification, Osnabrück, in Building and Exploring Web Corpora. Proceedings of the 3rd Web as Corpus Workshop, incorporating CLEANEVAL (WAC3-2007), Presses universitaires de Louvain. [http://purl.org/stefan.evert/PUB/BauerEtc2007\_FIASCO.pdf]

07.2007 **Sebastian Blohm, Philipp Cimiano, and Egon Stemle**, *Harvesting relations from the web - quantifiying the impact of filtering functions*, in *Proceedings of the 22nd Conference on Artificial Intelligence (AAAI-07)*, Association for the Advancement of Artificial Intelligence (AAAI).

[http://www.aifb.uni-karlsruhe.de/WBS/seb/publications/pronto-aaai07.pdf]

11.2005 Martin Bleichner, Eugenie Giesbrecht, Helmar Gust, Eva-Maria Leicht, Petra Ludewig, Sabine Möller, Wiebke Müller, Martin Schmidt, Moritz Stefaner, Egon Stemle, and Katja Wilke, ASADO: The analysis and structuring of aviation documents – final report, Technical report, Institute of Cognitive Science at the University of Osnabrück and Institute of Applied Linguistics at the University of Hildesheim.

http://iiegn.de/static/doc/bleichneretal2005.pdf

10.2005 **Egon Stemle**, A Flexible Integration of CL Techniques for Analyzing Linguistic Units in Large Document Repositories (unpublished), Cognitive Science BSc Thesis, Institute of Cognitive Science, University of Osnabrück, Germany.

http://iiegn.de/static/doc/stemle2005.pdf

## Administrative Experience

04.2006 – **Member of the Examination Board (Prüfungsausschuss)**, Cognitive Science – 03.2007 Study Programme, University of Osnabrück.

12.2005 – **Member of the Search Committee (Besetzungkommission)**, Institute of Cognitive Science, University of Osnabrück.

BAT IIa research associate in Artificial Intelligence.

Member of the Academic Studies Commission (Studienkommission), Cognitive 04.2005 --03.2008Science Study Programme, University of Osnabrück. 02.2005 -Member of the Search Committee (Berufungskommission), Faculty of Human--01.2006ities, University of Osnabrück. W3 professor ship Artificial Intelligence and Cognitive Science. Member of the Steering Committee (Vorstand), Institute of Cognitive Science, 10.2003 --04.2008University of Osnabrück. 07.2003 -Member of the Search Committee (Besetzungskommission), Institute of Cog--10.2003nitive Science, University of Osnabrück. BAT IIa research associate in Artificial Intelligence.

#### Other Activities

04.2006 **A for Alibi Symposium**, Uqbar Foundation, Utrecht University Museum [http://www.sternbergpress.com/?pageld=1204].

12.2005 **Amsterdam 2.0 Exhibition**, Mediamatic, Amsterdam [http://www.mediamatic.net/artefact-9850-en.html].

Technical counsel for Kasper Andreasen & Tine Melzer

03.2003 **Spring School**, Interdisciplinary College 2003 (IK2003 [http://www.ik-guenne.de/html/ik2003.html]), Günne at Lake Möhne.

Focus Theme: Applications, Brains and Computers

2003 **The Complete Dictionary**, Tine Melzer, 26 volumes, A–Z. Programming and Processing [http://www.tinemelzer.eu]

since 11.2002 Member of the German Cognitive Science Society (GK e.V.), [http://www.gk-ev. de].

since 1995 IT freelancer and technical consultant.

1992 - Representative player for the Bavarian and the Southern German handball - 1995 team.

1993 & 1994 Bavarian champion in handball with the school team.

## Languages

German Native
English Excellent

French **Basic** 

Primary education language at university.

5 years training during high-school.

## Computer Skills

programming JAVA, Prolog, Python, ML

scientific Matlab, Octave, R, PDP++, Weka, Protégé, OmniFind+UIMA

OS Linux, OS X, Windows 2000/XP

scripting Bash, PHP

design LATEX, InDesign, Illustrator, Omni-Graffle

service

Apache, PHP, MySQL, PostgreSQL, Exim, Mailman, SpamAssassin, DSpam, Trac, Subversion, ISC DHCP, ISC Bind, Cyrus, Dovecot, OpenVPN, Shorewall, Darwin

Calendar Server