

Anna Sågvall Hein



Professor Emerita in Computational Linguistics

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Background

- High School Examination, Linköping, 1960
- Master of Arts (Mathematics, Russian, Numerical Analysis, Pedagogics), Uppsala University, 1965
- Extensions to Master of Arts (Polish, Czech, Bulgarian), Uppsala University, 1968
- Post graduate studies at the University of Leningrad (linguistics, machine translation) 1965-1966
- Licentiate degree in Slavic languages, Uppsala University, 1970
- PhD in Slavic languages, Uppsala University, 1974
- Docent in Computational Linguistics, Uppsala University, 1981

Employment

- Teaching assistant at the Department of Slavic Languages, Uppsala University, 1967-1971
- Head of the Natural Language Processing Group at UDAC (Uppsala University Computing Center), 1970-80
- Head of UC DL (Uppsala Center for Computational Linguistics), Uppsala University, 1980-1986
- Acting professor of Linguistic Computing, University of Göteborg, 1986 -1989
- Professor of Computational Linguistics, Uppsala University, 1990 - 2008
- Guest professor of Computational Linguistics, Uppsala University, 2008

Services

- Head of the Department of Linguistics, 1991-2002
- Member of the Board of the Faculty of Languages, 1991-2008
- Dean of Östgöta nation, 1992-2005
- Member of the Board of the Ubbo Foundation, 1997-2005
- Member of the Board of the Virtual Faculty of Information Technology, 1998-2001, 2003-2007
- Chair of the Board of the National Research Programme on Language Technology (funded by VINNOVA), 2001-2003
- Member of the Board of the Nordic Research Programme on Language Technology (funded by the Nordic Council of Ministers), 2001-2005
- Member of the Board of the National Graduate School of Language Technology, 2001-2008
- Dean of the Faculty of Languages, 2002-2008
- Member of the Board of the Swedish Collegium for Advanced Study (SCAS) 2005-2012
- Chair of the Royal Society of the Humanities at Uppsala, 2007
- Member of the Board of the Swedish National Data Service, 2008-2012
- Member of the Research Council Committee for Linguistics, 2009-2011
- Member of the Board of the Olaus-Petri Foundation, 2006 -
- Chair of the Board of Convertus AB, 2006-
- CEO for Convertus AB, 2006-2009, 2011-

Research Interests

- Machine Translation
- Multilinguality
- Language Checking
- Text prediction
- Parsing
- Corpus Linguistics

Teaching

- Graduate School of Language Technology: [Machine Translation \(Level 2\)](#) , HT2004
- [Introduktionskurs i språkteknologi](#) [[kompendium](#)], 5 p. [[kursplan](#)],
- [Språkteknologiska delområden](#), 5 p. [[kursplan](#)]
- Graduate School of Language Technology: [Machine Translation \(Level 3\)](#), 5 p. [[kursplan](#)], VT2003
- [Språkgranskningsverktyg](#), 5 p. [[kursplan](#)]
- [Maskinöversättning och språkgranskning](#), 5 p. [[kursplan](#)]
- Supervision of master's theses at the Language Technology Programme
- Supervision of 5 doctoral theses in Computational Linguistics

Projects and Research

- A Swedish BLARK - [Basic Language Resource Kit for Swedish](#) within the project "An Infrastructure for Swedish language technology" / Swedish Research Council 2007-2008
- Text and Language in Assessment of Mathematics and Science / Swedish Research Council, 2006-2009

- GRAMEX – Methods and Tools for Automatic Grammar Extraction / Swedish Research Council, 2006-2009
- A Swedish – English SYSTRAN Module/ EU & SYSTRAN S.A.
- [KOMA](#) - Corpus-based Machine Translation/VINNOVA - Swedish Governmental Agency for Innovation Systems
- [FASTY](#) - Faster Typing for Disabled People/ EU
- [MATS](#) - Methodology and Application of a Translation System/ VINNOVA - Swedish Governmental Agency for Innovation Systems
- Contrastive Lexicology and the Automatic Recognition of Translation Equivalents/ RJ
- [PLUG](#) - Parallel Corpora in Linköping, Uppsala and Göteborg/NUTEK - Swedish Agency for Economic and Regional Growth and HSFR - Swedish Research Council for the Humanities and Social Sciences
- [ETAP](#) - Establishing and annotating parallel corpora/ RJ
- [Scania-project](#)/ Scania CV AB, Södertälje
- [Scarrie](#), Proof-reading of Scandinavian Languages/ EU
- [MIA](#), Multra at Work

Selected publications 1993 -

- Sågvall Hein, A., [On the Translation of Nominal Expressions in Multilingual Unification-Based Setting](#). In: Hajicova, E. (ed.), *Functional Approaches to Language Description. Proceedings of a Conference in Prague*, November 24-27 1992. Prague 1993.
- Sågvall Hein, A., Preferences and Linguistic Choices in the Multra Machine Translation System. In: Eklund, R. (ed.), *NODALIDA '93 Proceedings of '9:e Nordiska Datalogvistikdagarna'*, Stockholm 3-5 June 1993. Stockholm 1994.
- Sågvall Hein, A., [Preference Mechanisms of the Multra Machine Translation system](#). In: Partee, B. H. & Sgall, P. (eds.) *Discourse and Meaning. Papers in Honour of Eva Hajicova*. John Benjamins Publishing Company. Amsterdam/Philadelphia. 1996.
- Almqvist, I. & A. Sågvall Hein, [Defining ScaniaSwedish - A Controlled Language for Truck Maintenance](#). In: *Proceedings of the First International Workshop on Controlled Language Applications*. 26-27 March 1996. Centre for Computational Linguistics. Katholieke Universiteit Leuven.
- Sågvall Hein, A., 1997, [Language Control and Machine Translation](#). In: *Proceedings of the 7th International Conference on Theoretical and Methodological Issues in Machine Translation*. July 23-25, 1997. St. John's College, Santa Fe, New Mexico.
- Sågvall Hein, A., Almqvist, I. & Starbäck, P., 1997, Scania Swedish - A Basis for Multilingual Machine Translation. In: *Translating and the Computer 19*. Papers from the Aslib conference held on 13 & 14 November 1997. London.
- Sågvall Hein, Anna: Maskinöversättning och kontrollerat språk. In: Wilske, Detlef (ed.) *LSP and Theory of Translation*. 18th VAKKI Symposium. Vaasa 14-15.2.1998. University of Vaasa. Faculty of Humanities, Vaasa, Finland.
- Sågvall Hein, Anna: [A Chart-Based Framework for Grammar Checking Initial Studies](#). In: *NODALIDA '98 Proceedings Vol. 11*. Center for Sprogteknologi, Denmark, 1998.
- Sågvall Hein, Anna & Starbäck, Per: A Test Version of the Grammar Checker for Swedish, Deliverable 6.5.1. In: *Working Papers in Computational Linguistics & Language Engineering*, vol 12, 1999. Dept. of Linguistics, Uppsala University.

- Sågvall Hein, Anna: A Specification of the Required Grammar Checking Machinery, Deliverable 6.5.2. In: *Working Papers in Computational Linguistics & Language Engineering*, vol 12, 1999. Dept. of Linguistics, Uppsala University.
- Sågvall Hein, Anna: A Grammar Checking Module for Swedish, Deliverable 6.6.3. In: *Working Papers in Computational Linguistics & Language Engineering*, vol 12, 1999. Dept. of Linguistics, Uppsala University.
- Sågvall Hein, Anna, Olsson, Leif-Jöran, Dahlqvist, Bengt & Mats, Erik: Evaluation Report for the Swedish Prototype, Deliverable 8.1.3. In: *Working Papers in Computational Linguistics & Language Engineering*, vol 13, 1999. Dept. of Linguistics, Uppsala University.
- Ahlbom, Viktoria & Sågvall Hein, Anna: Test Suites Covering the Functional Specifications of the Sub-components of the Swedish Prototype, Deliverable 7.1.3. In: *Working Papers in Computational Linguistics & Language Engineering*, vol 13, 1999. Dept. of Linguistics, Uppsala University.
- Ahrenberg, Lars; Merkel, Magnus; Sågvall Hein, Anna; Tiedemann, Jörg: Evaluation of LWA and UWA, In: *Working Papers in Computational Linguistics & Language Engineering*, vol 15, 1999. Dept. of Linguistics, Uppsala University.
- Sågvall Hein, Anna: The PLUG-project. Parallel Corpora in Linköping, Uppsala, Göteborg: Aims and Achievements. In: *Working Papers in Computational Linguistics & Language Engineering*, vol 16, 1999. Dept. of Linguistics, Uppsala University.
- Ahrenberg, Lars and Merkel, Magnus and Ridings, Daniel and Sågvall Hein, Anna and Tiedemann, Jörg: [Automatic processing of parallel corpora: A Swedish perspective](#), Computer and Information Science Series. Linköping University Electronic Press, 1999.
- Poulsen, Claus, Sågvall Hein, Anna, de Smedt, Koenraad: *Final Project Report*. SCARRIE Deliverable 0.4. Word Finder AB, Växjö, Sverige, 1999.
- Sågvall Hein, Anna (ed.): *Working Papers in Computational Linguistics & Language Engineering*, vols 3-19 (1999). ISSN: 1401-923X, Dept. of Linguistics, Uppsala University.
- Sågvall Hein, Anna et al: [Om maskinöversättning](#). NUTEKs slutrapport av regeringsuppdarg N1999/7189/ITFOU 1999-0922, 1999.
- Sågvall Hein, Anna. *PLUG. Parallel corpora in Linköping, Göteborg and Uppsala*. 1998-04-01--2000-03-31. Final report, Uppsala University, Department of Linguistics. 2000.
- Almqvist, Ingrid & Sågvall Hein, Anna. A Language Checker of Controlled Language and its Integration in a Documentation and Translation Workflow. *Proceedings of the 22nd Conference on Translating and the Computer 22*. London. Association for Information Management. 2000.
- Ahrenberg, Lars, Magnus Merkel, Anna Sågvall Hein and Jörg Tiedemann, 2000, [Evaluation of word alignment systems](#). *Proceedings of the Second International Conference on Linguistic Resources and Evaluation (LREC-2000)*, Athens, Greece, 31 May - 2 June, 2000, Volume III: pp. 1255-1261.
- Sågvall Hein, Anna. The PLUG project. Parallel Corpora in Linköping, Uppsala, Göteborg. Aims and achievements. In L. Borin (ed.) *Parallel Corpora, Parallel Worlds, Selected papers from a symposium on parallel and comparable corpora at Uppsala University, Sweden, April 22-23, 1999*. Amsterdam: Rodopi, 2002.
- Sågvall Hein, Anna. Some Problems of Definiteness and Reference in Machine Translation from Swedish to English. In: Kerstin Jonasson (ed.) *Referens och översättning, Rapporter från forskningsprogrammet Översättning och tolkning som*

språk- och kulturmöte vid Stockholms universitet och Uppsala universitet. Under utgivning.

- Sågvall Hein, Anna et al, [Scaling up an MT Pototype for Industrial Use. Databases and data flow](#). *Proceedings of LREC 2002. Third International Conference on Language Resources and Evaluation*. Volume 5, pp. 1759 - 1766.
- Öquist, Gustav; Sågvall Hein, Anna; Ygge, Jan & Goldstein, Mikael: Enhancing Readability on Mobile Devices by Predictive Text Presentation. Presentation at Cognitive Science Symposium, 16-17 June 2003, organized by the Center for Cognitive Science in Stockholm and Rutgers Center for Cognitive Science (RuCCS), USA. 2003.
- Sågvall Hein, Anna, Weijnitz, Per, Forsbom, Eva, Tiedemann, Jörg & Gustavii, Ebba. MATS - A Glass Box Machine Translation System. *Proceedings of the Ninth Machine Translation Summit*, New Orleans, USA, September 23-27, 2003, pp. 491 - 493.
- Sågvall Hein, Anna. Språket och datorn. I Ransbo, Gunilla (ed.) *Ut dicitur. Congressus Upsaliensis. Anno Linguarum Europaeo MMI Habendus. Till språkets lov*. Föredrag vid nationell konferens för akademiska språklärare den 27-28 april 2002, pp. 49-58.
- Sågvall Hein, Anna, Datorn åter som översättare. *Forskning och framsteg*. Årgång 39. Nr 1 2004. pp. 50-53.
- Sågvall Hein, Anna, 2004. Maskinöversättningens mål och möjligheter. In: *Språkbruk 4/2004*. Tidskrift utgiven av Svenska språkbyrån. Forskningscentralen för de inhemska språken. Helsingfors. pp. 7-11.
- Weijnitz, Per, Sågvall Hein, Anna, Forsbom, Eva, Gustavii, Ebba, Pettersson, Eva & Jörg Tiedemann, 2004, [The machine translation system MATS - past, present & future](#). In: *Proceedings of the workshop Recent advances in Scandinavian machine translation*.
- Sågvall Hein, Anna, 2005, Datorn behöver grammatik och statistik. *Språkvård*. Tidskrift utgiven av Svenska språknämnden. 2005/1. pp. 23-30.
- Sågvall Hein, Anna, 2005, Problem och metoder i maskinöversättning. *Kungl. vetenskapssamhällets i Uppsala årsbok*, 35, 2003-2004. pp. 39-60.
- Sågvall Hein, Anna & Weijnitz, Per, 2006, Approaching a New Language in Machine Translation - Considerations in Choosing a Strategy. In: *Proceedings of the workshop on 'Strategies for developing machine translation for minority languages'* (5th SALT MIL Workshop on Minority Languages), May 23rd 2006, Genoa, Italy. Satellite workshop of the LREC International Conference on Language Resources and Evaluation, Genoa, Italy, May 2006. ([ppt](#)) ([pdf](#))
- Sågvall Hein, Anna & Forsbom, Eva, 2006. [A Swedish BLARK](#), presentation at BLARK workshop, January 29, 2006, GSLT retreat, Gullmarsstrand, Sweden.
- Sågvall Hein, Anna, 2008, Nya metoder ger bättre maskinöversättning. Im Domeij, Rickard (ed.), *Tekniken bakom språket*, Norstedts.