

Anssi Yli-Jyrä
Title of Docent
Faculty Common Matters
Language Technology
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University of Helsinki
Finland
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Curriculum vitae

Education

Title of Docent, Language Technology, University of Helsinki, Finland, 2006

PhD in Language Technology, University of Helsinki, Finland, 13/9/2005

MSc (secondary) in Computer Science, University of Helsinki, Finland, 2005

MA in Computational Linguistics, University of Helsinki, Finland, 1997

Current and Previous Positions

Research Coordinator, (Faculty of Agriculture and Forestry), University of Helsinki, 2020

Academy Research Fellow 2013 - 2019

Deputy Professor of Language Technology, University of Helsinki, 8/2012 – 7/2013

University Researcher, University of Helsinki, 2008 – 2012

Application Specialist, CSC - IT Centre for Science, Finland, 1998 – 2008

PhD Student in Language Technology (on leave from CSC), U. Helsinki, Finland, 2002 – 2004

Research Adjunct in Computational Linguistics, University of Helsinki, Finland, 1997 – 1998

System Analyst, Bible Encyclopedia Publ. (Raamatun Tietokirja/AikaMedia), Finland, 1992 – 1997

Fellowships

Visiting Scholar (total 2 months) at the Hebrew University of Jerusalem, Israel, 2018-2020

Visiting Scholar (2 months) at the Inf. Sciences Institute, U. Southern California, USA, 2017

Academy Research Fellow, Academy of Finland, Finland, 2013 – 2018

Visiting Professor (1 week) at the Inf.Sc.Dept., U. Stellenbosch, South Africa, 2013

Visiting Fellow (1 year), Clare Hall college, University of Cambridge, UK, 2013 – 2014

Acad.Visitor (1 year) at the Machine Intelligence Lab., Dept.Eng., Univ. Cambridge, 2013 – 2014

Visiting Professor (2 weeks) at the Inst. Kiswahili Studies, Dar es Salaam, Tanzania, 2012

Postdoc Research Fellow, Academy of Finland, Finland, 2009 – 2011

Visiting Fellow (2 weeks) at the School of Mathematics, Georgia Technical U., USA, 2008

Postdoc Fellow (2 months) at the Budapest U. Technology and Economics, Hungary, 2007

PhD Scholarship, Nordic Academy of Advanced Study, Norway, 2002 – 2004

Participation of Supervision of Graduate Students and Postdoc Fellows

Razie Ehsani (Visiting PostGrad/PostDoc, IşıkU), *Finite-State Translation of Azerbaijani* (advisor), 2018

Uliana Petrunina (Visiting PostGrad, UTromsø), *Weighted Disamb. of Russian Participles* (co-advisor), 2/2018 – now

Jack Rueter (Post Doc, UH), *UniversalDependency Syntax for Erzya (PI)*, 2017

Aarne Talma (PostGrad, UH), *Deep Learning and Natural Language Inference* (co-advisor), 2018 – now

Josi Purhonen (Master Student, UH), *Synchronization of Morph. Analysed Editions of the Hebrew and Greek Bible*, 2018–now

Miikka Silfverberg (PostGrad) (co-advisor) 2008–2016

4 Masters students, UH, 2008–2016

Helsinki Language Technology Group (co-advisor), 2017–

Helsinki FST Technology Group, UH (co-advisor), 2008 –2013

Teaching Activities

Qualification, University Pedagogics (60 cr), University of Helsinki, Finland, 2015

”Qualified for the associate professorship”, DTU Compute, Danmark, 2014

International Teaching at U. Cambridge (UK) and T.U. Darmstadt (Germany), 2013 – 2014

Pre-Conference Tutorial presenter, ACL 2014, Bulgaria, 2013

Deputy Professor in Lang.Technology, Dept.Modern Languages, U.Helsinki, Finland, 2012 – 2013

Local courses in Language Technology, U.Helsinki, Finland, 1994 – 14 different

Organisation of International Scientific Meetings

PC Co-chair of TWOLDAY 2005, FSMNLP 2008, FSMNLP 2009

OC Chair of FSMNLP 2005

Institutional Responsibilities

Debuty Head of Language Technology (2012–2013), U.Helsinki, Finland

Board member of the Department of General Linguistics (1998 – 1999), U.Helsinki, Finland

Commissions of Trust

Board Member of the Finnish Artificial Intelligence Society

Treasurer (2020-), SIGFSM, Assoc. for Comp. Linguistics, USA

Advisory Board member (2012–), SIGFSM, Assoc. for Comp. Linguistics, USA

Co-applicant (nominated), Proposal for a Dagstuhl Perspectives Workshop, Germany

Co-founder (1997), Calfat Oy, Finland

Consultant member (2008–), Wycliffe Bible Translators, Finland

Coordinator of the Language Bank of Finland (2005 – 2007), CSC - IT Centre for Science, Finland

Evaluator for a Lecturer Position, UK

Founder and President of SIGFSM (2009–2012), Assoc. for Comp. Linguistics, USA

Guest Editor (for journals) Cambridge U.Press, Springer, CSLI Publications, IOS Press

Program Committee member with reviewing duties, premium venues in Comp.Sc. and Comp.Linguistics (selected): ACL 2012–2017, FSMNLP 2005–2017, SCiL 2018, IJCNLP 2013–2017, Swedish LT Confer- ence 2017, Math. of Language 2017/2015/2013; IWCLUL 2015; Human Lang. Technology 2012; Empirical Methods in NLP 2014, FormalGrammar 2007/2006; Recent Advances in NLP 2011, NoDaLiDa 2007.

Referee (proposals): Nat.Res.Found. (S.Africa), E.Aaltonen F., Wihuri F., Kone F., O. Öflund F. (Finland), Riksbankens Jubileumsfond (Sweden), Lang.Bank of Finland; Finnish Nat. Electronic Library (Finland)

Referee (for journals): *Natural Language Engineering (Cambridge)*, *J. Logic and Computation (Oxford)*, *Oxford Handbook of Comp.Linguistics (Oxford)*, *J.Lang.Modeling (OASPA)*, *Int.J.Foundations Comp.Sci. (World Scientific)*, *SKY Journal (The Ling.Assoc.of Finland)*, *Nordic J. African Languages (U. Helsinki)*, *CSLI Studies in Comp.Linguistics ONLINE (CSLI Publications)*, *Lang. Res. and Evaluation (Springer)*

Standardisation Committee member (IEC JTC1/SC2/WG2 2006 – 2007), ISO

Supervisor Pool member (2008–) of the LANGNET Graduate School, Finland

Membership in Scientific Societies, Networks and Associations

PI Board Member of BAULT - a multidisciplinary research community at the University of Helsinki (2010–) •

PI Member of the HLG Community, the Helsinki Logic Group (2010–)

Member of the Association of Computational Linguistics (ACL)

Northern European Association for Language Technology (NEALT)

Member of ACL Special Interest Group on Finite-State Methods (SIGFSM)

Major Research Collaborations

Kevin Knight, RNN Language Models, Information Sciences Inst., U.Southern California, USA

Trond Trosterud, Constraint Grammar, University of Tromsø, Norway

Edward Gibson, Sentence Processing, TedLab, Massachusetts Institute of Technology, USA

Carlos Gómez-Rodríguez, Nonprojective Parsing, Dept. Computer Science, U. A Coruña, Spain

Mark-Jan Nederhof, Discontinuous Parsing, School of Com.Sc., U. St. Andrews, UK

Hellis Tamm, Quotient/Átomata theory, Inst.Cybernetics, Tallinn University of Technology

Bill Byrne, Automata in Machine Translation, Mach.Intell.Lab., Univ. Cambridge

Bruce Watson, Algorithm Taxonomies, Comp.Sc.Department, U.Stellenbosch, South Africa

András Kornai, Extended Finite-State Translations, Budapest Institute of Technology, Hungary

Qualifications

Pedagogics, Qualified teacher, Helsingin yliopisto

2011 → 2014

Award Date: 24 Jun 2015

Language technology, Ph.D., University of Helsinki

1998 → 13 Sep 2005

Award Date: 13 Sep 2005

Principal Investigator

Period : 01.06.2010 - 31.12.2017 in Department of Modern Languages 2010-2017

Principal Investigator

Period : 31.01.2018 - * in Department of Digital Humanities

Principal Investigator

Period : 15.05.2018 - * in Department of Digital Humanities

Employment

Title of Docent

Faculty Common Matters

University of Helsinki

Finland

1 Jan 2010 → present

Language Technology

University of Helsinki

University of Helsinki, Finland

1 Jan 2010 → present

Research outputs

A Derivational Model of Discontinuous Parsing

Nederhof, M-J. & Yli-Jyrä, A., 10 Aug 2020, (E-pub ahead of print) In: Information and Computation.

<https://doi.org/10.1016/j.ic.2020.104619>.

HELFI: a Hebrew-Greek-Finnish Parallel Bible Corpus with Cross-Lingual Morpheme Alignment

Yli-Jyrä, A., Purhonen, J., Liljeqvist, M., Antturi, A., Nieminen, P., Ranttilä, K. M. & Luoto, V., May 2020, *Proceedings of the 12th Language Resources and Evaluation Conference*. Calzolari [et al.], N. (ed.). Paris: European Language Resources Association (ELRA), p. 4229–4236 8 p.

On Practical Realisation of Autosegmental Representations in Lexical Transducers of Tonal Bantu Languages

Yli-Jyrä, A., 2020, *Proceedings of the Language Technologies for All (LT4All)*. Adda, G., Choukri, K., Kasinskaite-Buddeberg, I., Mariani, J., Mazo, H. & Sakriani, S. (eds.). Paris: European Language Resources Association (ELRA), p. 346-349 4 p.

Constraint Grammar is a hand-crafted Transformer

Yli-Jyrä, A., 3 Dec 2019, *Proceedings of the NoDaLiDa 2019 Workshop on Constraint Grammar - Methods, Tools and Applications, 30 September 2019, Turku, Finland*. Bick, E. & Trosterud, T. (eds.). Linköping: Linköping University Electronic Press, p. 45-49 5 p. 9. (NEALT Proceedings Series; no. 33)(Linköping Electronic Conference Proceedings; no. 168).

Transition-Based Coding and Formal Language Theory for Ordered Digraphs

Yli-Jyrä, A., 23 Sep 2019, *The 14th International Conference on Finite-State Methods and Natural Language Processing: Proceedings of the Conference*. Vogler, H. & Maletti, A. (eds.). Stroudsburg: The Association for Computational Linguistics, p. 118–131 14 p. (Proceedings of the International Conference on Finite-State Methods and Natural Language Processing).

Sentence Embeddings in NLI with Iterative Refinement Encoders

Talman, A. J., Yli-Jyrä, A. & Tiedemann, J., 31 Jul 2019, In: *Natural Language Engineering*. 25, 4, p. 467-482 16 p.

Height-Deterministic Target Languages and the Encoder-Decoder Parsing Model (poster on a working paper)

Yli-Jyrä, A., 12 Jul 2019. 1 p.

Constraint Grammar As a Hand-Crafted Transformer

Yli-Jyrä, A., 2019.

Forgotten Islands of Regularity in Phonology

Yli-Jyrä, A. M., 2019, *K + K = 120 Papers dedicated to László Kálmán and András Kornai on the occasion of their 60th birthdays*. Gyuris, B., Mády, K. & Recski, G. (eds.). Budapest: MTA Research Institute for Linguistics, p. 541–559 19 p.

How to embed noncrossing trees in Universal Dependencies treebanks in a low-complexity regular language

Yli-Jyrä, A., 2019, In: *Journal of Language Modelling*. 7, 2, p. 177-232 56 p.

Optimal Kornai-Karttunen Codes for Restricted Autosegmental Representations

Yli-Jyrä, A. M., 2019, *Tokens of Meaning: Papers in Honor of Lauri Karttunen*. Condoravdi, C. & Holloway King, T. (eds.). Stanford: Center for the Study of Language and Information (CSLI)

Bounded-Depth High-Coverage Search Space for Noncrossing Parses

Yli-Jyrä, A. M., 4 Sep 2017, *Proceedings of the 13th International Conference on Finite State Methods and Natural Language Processing: FSMNLP 2017*. Drewes, F. (ed.). Stroudsburg: The Association for Computational Linguistics, p. 30-40 11 p.

A Derivational Model of Discontinuous Parsing

Nederhof, M.-J. & Yli-Jyrä, A. M., 6 Mar 2017, *Language and Automata Theory and Applications: LATA 2017*. Martín-Vide, C. (ed.). Berlin: Springer-Verlag, p. 299-310 12 p. (Lecture Notes in Computer Science).

Generic Axiomatization of Families of Noncrossing Graphs in Dependency Parsing

Yli-Jyrä, A. M. & Gómez-Rodríguez, C., 2017, *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*. Barzilay, R. & Kan, M.-Y. (eds.). Stroudsburg: The Association for Computational Linguistics, p. 1745-1755 11 p.

The Power of Constraint Grammars Revisited

Yli-Jyrä, A. M., 2017, *Proceedings of the NoDaLiDa 2017 Workshop on Constraint Grammar - Methods, Tools and Applications: Linköping Electronic Conference Proceedings 140*. Bick, E. & Trosterud, T. (eds.). Linköping: Linköping University Electronic Press, Vol. 140. p. 23-31 9 p. (NEALT Proceedings Series; vol. 33).

Aligned Multistring Languages

Yli-Jyrä, A. M., 18 Jul 2016, *TTATT 2016, Proceedings of the Workshop: Workshop on Trends in Tree Automata and Tree Transducers, Seoul, South Korea July 18, 2016*. Maletti, A. (ed.). Stuttgart, Germany, Vol. 1. p. 51-57 7 p.

Three Equivalent Codes for Autosegmental Representations

Yli-Jyrä, A., 22 Jun 2015, *Proceedings of the 12th International Conference on Finite-State Methods and Natural Language Processing 2015: FSMNLP 2015 Düsseldorf*. Hanneforth, T. & Wurm, C. (eds.). Stroudsburg: The Association for Computational Linguistics, Vol. 12. 9 p.

A Hierarchy of Mildly Context-Sensitive Dependency Grammars

Yli-Jyrä, A. M. & Nykänen, M., 31 Dec 2013, In: *Proceedings of the FG* . p. 155-170 16 p.

On Finite-State Tonology with Autosegmental Representations

Yli-Jyrä, A. M., 15 Jul 2013, *Proceedings of the 11th International Conference on Finite State Methods and Natural Language Processing*. Stroudsburg: The Association for Computational Linguistics, Vol. 11. p. 90-98 9 p.

The Mathematics of Language Learning

Kornai, A., Penn, G., Rogers, J. & Yli-Jyrä, A. M., 2013, *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Tutorials)*. Bos, J. & Hall, K. (eds.). Sofia, Bulgaria: The Association for Computational Linguistics, Vol. 51. p. 11-13 3 p.

Implementation of replace rules using preference operator

Drobac, S., Silfverberg, M. & Yli-Jyrä, A. M., 23 Jul 2012, *Proceedings of the FSMNLP 2012*. Stroudsburg: The Association for Computational Linguistics, 5 p.

Refining the design of a contracting finite-state dependency parser

Yli-Jyrä, A. M., Piitulainen, J. & Voutilainen, A., 23 Jul 2012, *Proceedings of FSMNLP 2012*. ACL Anthology, Vol. 2012. 8 p.

On Dependency Analysis via Contractions and Weighted FSTs

Yli-Jyrä, A. M., 2012, *Shall We Play the Festschrift Game?*. Santos, D., Nganga, W. & Lindén, K. (eds.). Berlin Heidelberg: Springer-Verlag, Vol. 2012. p. 133-158

An Efficient Constraint Grammar Parser based on Inward Deterministic Automata

Yli-Jyrä, A. M., 17 Nov 2011, *Proceedings of the NODALIDA 2011 Workshop Constraint Grammar Applications*. Bick, E., Hagen, K., Müürisepp, K. & Trosterud, T. (eds.). Tartu University Library, Tartu, Estonia: Northern European Association for Language Technology , Vol. 14 (2011). p. 50-60 11 p. (NEALT Proceedings Series; vol. 14 (2011)).

Explorations on Positionwise Flag Diacritics in Finite-State Morphology

Yli-Jyrä, A. M., 10 May 2011, *Proceedings of the 18th Nordic Conference of Computational Linguistics NODALIDA 2011*. Sandford Pedersen, B., Nešpore, G. & Skadiņa, I. (eds.). Tartu, Estonia: Northern European Association for Language Technology , p. 262-269 8 p. (NEALT Proceedings Series; vol. 11 (2011)).

Compiling Simple Context Restrictions with Nondeterministic Automata

Yli-Jyrä, A. M., 2011, *Proceedings of the 9th International Workshop on Finite State Methods and Natural Language Processing*. Constant, M., Maletti, A. & Savary, A. (eds.). Stroudsburg, PA, USA: The Association for Computational Linguistics, p. 30-38 9 p.

Constraint Grammars and Contextual Grammars without Axioms

Yli-Jyrä, A. M., 2011, *Întâlniri Cu / Meetings with Solomon Marcus*. Spandonide, L. & Paun, G. (eds.). Spandugino, Vol. volumul 2. p. 783-784 2 p. (Colecia Distinguo; vol. volumul 2).

Finite-State Methods and Models in Natural Language Processing

Yli-Jyrä, A. M., Kornai, A. & Sakarovitch, J., 2011, In: *Natural Language Engineering*. 17, 2, p. 141-144 4 p.

Conversions between crisply bipartite and unambiguous automata

Yli-Jyrä, A. M., 3 May 2010, *Weighted Automata: Theory and Applications, Leipzig, May 3-7, 2010*. Droste, M., Gastin, P., Kuich, W. & Vogler, H. (eds.). Leipzig: Universität Leipzig, 1 p.

Finite-State Methods and Natural Language Processing: 8th International Workshop, FSMNLP 2009, Pretoria, South Africa, July 2009, Revised Selected Papers

Yli-Jyrä, A. M. (ed.), Kornai, A. (ed.), Sakarovitch, J. (ed.) & Watson, B. (ed.), 2010, Berlin Heidelberg: Springer-Verlag. 147 p. (Lecture Notes in Artificial Intelligence; vol. 6062, no. 6062)

On path counting and ambiguity in automata

Yli-Jyrä, A. M., 2010, (Submitted) In: University of Szeged. *Acta Cybernetica*.

An efficient double complementation algorithm for superposition-based finite-state morphology

Yli-Jyrä, A. M., 2009, In: *NEALT Proceedings Series*. 4, p. 206-213 8 p.

CLARIN and free open source finite-state tools

Koskenniemi, K. & Yli-Jyrä, A. M., 2009, *Finite-State Methods and Natural Language Processing: Post-proceedings of the 7th International Workshop FSMNLP 2008*. Piskorski, J., Watson, B. & Yli-Jyrä, A. (eds.). IOS PRESS, p. 3-13 11 p. (Frontiers in Artificial Intelligence and Applications; vol. 191).

Finite-State Methods and Natural Language Processing: Post-proceedings of the 7th International Workshop FSMNLP 2008

Piskorski, J. (ed.), Watson, B. (ed.) & Yli-Jyrä, A. M. (ed.), 2009, Amsterdam / Berlin / Tokyo / Washington, DC: IOS PRESS. 235 p. (Frontiers in Artificial Intelligence and Applications; vol. 191)

Applications of Diamonded Double Negation

Yli-Jyrä, A., 2008, *Finite-state methods and natural language processing: 6th International Workshop, FSMNLP 2007, Potsdam, Germany, September 14-16, Revised Papers*. Hanneforth, T. & Würzner, K-M. (eds.). Potsdam: Potsdam University Press, p. 6-30 25 p.

Transducers from Parallel Replace Rules and Modes with Generalized Lenient Composition

Yli-Jyrä, A., 2008, *Finite-state methods and natural language processing: Thomas Hanneforth, Kay-Michael Würzner(eds.)*. Potsdam: Potsdam University Press, p. 197-212 16 p.

A new method for compiling parallel replacement rules

Yli-Jyrä, A. & Koskenniemi, K., 2007, In: *Lecture Notes in Computer Science*. 2007, p. 320-321 2 p.

Compiling generalized two-level rules and grammars

Yli-Jyrä, A. & Koskenniemi, K., 2006, *Advances in natural language processing*. p. 174 - 185 12 p.

Finite-state methods and natural language processing: 5th international workshop, FSMNLP 2005, Helsinki, Finland, September 1-2, 2005 : revised papers

Yli-Jyrä, A. (ed.), Karttunen, L. (ed.) & Karhumäki, J. (ed.), 2006, Berlin: Springer. 312 p. (Lecture notes in artificial intelligence; no. 4002)

Pivotal synchronization languages : a framework for alignments

Yli-Jyrä, A. & Niemi, J., 2006, *Finite-state methods and natural language processing*. Berlin: Springer, p. 271-282 12 p.

Pivotal synchronization languages: a framework for alignments

Yli-Jyrä, A. M. & Niemi, J. A., 2006, *Finite-State Methods and Natural Language Processing: 5th International Workshop, FSMNLP 2005, Helsinki, Finland, September 1-2, 2005. Revised Papers*. Yli-Jyrä, A., Karttunen, L. & Karhumäki, J. (eds.). Berlin Heidelberg: Springer-Verlag, p. 271--282 12 p. (Lecture Notes in Artificial Intelligence; vol. 4002).

Two bracketing schemes for the Penn Treebank

Yli-Jyrä, A., 2006, *A man of measure*. Turku: The Linguistic Association of Finland, p. 472 - 479 8 p.

Two bracketing schemes for the Penn Treebank

Yli-Jyrä, A. M., 2006, *A man of measure: Festschrift in honour of Fred Karlsson on his 60th birthday*. Turku: The Linguistic Association of Finland, p. 472-479 8 p. (SKY journal of linguistics, special supplement; no. 19).

Approximating Dependency Grammars through Intersection of Star-Free Regular Languages

Yli-Jyrä, A. M., 2005, In: *International Journal of Foundations of Computer Science*. 16, 3, p. 565-579 15 p.

Approximating dependency grammars through intersection of regular languages

Yli-Jyrä, A., 2005, *Implementation and application of automata*. p. 281-292 12 p.

Contributions to the Theory of Finite-State Based Grammars

Yli-Jyrä, A. M., 2005, *Yliopistopaino*. 104 p.

Inquiries into words, constraints and contexts: Festschrift in the honour of Kimmo Koskenniemi on his 60th birthday

Arppe, A., Carlson, L., Linden, K., Piitulainen, J. O., Suominen, M., Vainio, M., Westerlund, H. & Yli-Jyrä, A. M., 2005, [S.I.]: CSLI publications. 288 p. (CSLI Studies in Computational Linguistics ONLINE)

Linguistic grammars with very low complexity

Yli-Jyrä, A. M., 2005, *Inquiries into Words, Constraints and Contexts: Festschrift in the Honor of Kimmo Koskenniemi*. Arppe, A., Lindén, K., Piitulainen, J., Suominen, M., Vainio, M., Westerlund, H. & Yli-Jyrä, A. (eds.). Stanford: CSLI publications, p. 172-183 12 p. (CSLI Studies in Computational Linguistics ONLINE).

Toward a widely usable finite-state morphology workbench for less studied languages, 1: Desiderata

Yli-Jyrä, A., 2005, In: *Nordic Journal of African Studies*. 14, 4, p. 471-491 21 p.

A hierarchy of mildly context sensitive dependency grammar

Yli-Jyrä, A. M., 2004, *Proceedings of Formal Grammar 2004*. Monachesi, P. (ed.). p. 151-165 (preproceedings pages) 15 p. (FG Conferences).

Axiomatization of restricted non-projective dependency trees through finite-state constraints that analyse crossing bracketings

Yli-Jyrä, A. M., 2004, *EACL 2003, 10th Conference of the European Chapter of the Association for Computational Linguistics, April 12-17, 2003, Agro Hotel, Budapest, Hungary*. Kruijff, G-J. M. & Duchier, D. (eds.). p. 33-40

Compiling contextual restrictions on strings into finite-state automata

Yli-Jyrä, A. M. & Koskenniemi, K., 2004, *Proceedings of the Eindhoven FASTAR Days 2004, Proceedings. Computer Science Reports 04/40, Eindhoven*, . Cleophas, L. & Watson, B. W. (eds.). Eindhoven: Technische Universiteit Eindhoven, 21 p.

Simplifications of intermediate results during intersection of multiple weighted automata

Yli-Jyrä, A. M., 2004, *Weighted Automata: Theory and Applications, Dresden, Germany, June 1-5, 2004*. Droste, M. & Vogler, H. (eds.). (Technische Berichte der Fakultät Informatik; vol. 2004, no. TUD-FI04-05).

Describing syntax with star-free regular expressions

Yli-Jyrä, A. M., 2003, *Proceedings of the EACL 2003*. Copestake, A. & Hajic, J. (eds.). Vol. 10. p. 379-386 8 p.

Multiplanarity - a model for dependency structures in treebanks

Yli-Jyrä, A. M., 2003, *TLT 2003, Proceedings of the Second Workshop on Treebanks and Linguistic Theories*. Nivre, J. & Hinrichs, E. (eds.). Växjö, Sweden: Växjö University Press, p. 189-200 12 p.

Regular approximations through labeled bracketing (revised version)

Yli-Jyrä, A. M., 2003, *Unknown host publication*. Jaeger, G., Monachesi, P., Penn, G. & Wintner, S. (eds.). 14 p.

Structural correspondence between finite-state intersection grammar and constraint satisfaction problem (extended abstract)

Yli-Jyrä, A. M., 2001, *Finite-State Methods in Natural Language Processing 2001 (FSMNLP 2001), ESSLLI Workshop*. Karttunen, L., Koskenniemi, K. & van Noord, G. (eds.). Helsinki, Vol. 2001. p. 1-4

Iso Raamatun Sanahakemisto: osat 1 & 2

Luoto, V. (ed.), Liljeqvist, M. (ed.), Yli-Jyrä, A. M. (ed.), Antturi, A. (ed.), Ranttilä, K. M. (ed.) & Nieminen, P. (ed.), 1997, 1 ed. Saarijärvi: Aika Oy Kristilliset Kirjat. 2278 p.

Menetelmiä äärellisiin automaatteihin perustuvan lauseenjäsennyksen tehostamiseksi

Yli-Jyrä, A. M., 1997, Helsingin yliopisto, yleisen kielitieteen laitos.

Schematic finite-state intersection parsing

Yli-Jyrä, A. M., 1995, *Short Papers Presented at the 10th Nordic Conference of Computational Linguistics (NODALIDA-95)*. Koskenniemi, K. (ed.). 9 p.

Activities

AI Day 2020

Anssi Yli-Jyrä (Attendee)
26 Nov 2020

AI Day 2020 (Event)

Anssi Yli-Jyrä (Reviewer)
26 Nov 2020

Second International Workshop on Designing Meaning Representations (Event)

Anssi Yli-Jyrä (Reviewer)
24 Aug 2020 → 7 Oct 2020

Professuurin virantäyttö: opetuksen arviointi (Event)

Anssi Yli-Jyrä (Member)
21 Jan 2020

The Rachel and Selim Benin School of Engineering and Computer Science, The Hebrew University of Jerusalem, Israel

Anssi Yli-Jyrä (Visiting researcher), Mirjam Ronning (Other role), Halvor Ronning (Other role) & Omri Abend (Other role)
1 Jan 2020 → 17 Jan 2020

NLP Reading Club Talk: Embedding Arbitrary Graphs to the String Space to Support Succinct Representation of Infinite Sets of Graphs

Anssi Yli-Jyrä (Speaker)
16 Dec 2019

The Rachel and Selim Benin School of Engineering and Computer Science, The Hebrew University of Jerusalem, Israel

Anssi Yli-Jyrä (Visiting researcher)
10 Dec 2019 → 19 Dec 2019

University of A Coruña, Department of Computer Science, LyS research group

Anssi Yli-Jyrä (Visiting researcher), Carlos Gómez Rodríguez (Other role), Michalina Strzyz (Other role) & David Vilares Calvo (Other role)

11 Nov 2019 → 22 Nov 2019

Talk to LyS Research Group: Embedding Graphs to the String Space to Support Succinct Representation of Graph Properties

Anssi Yli-Jyrä (Speaker)

5 Nov 2019

University of Umea, Department of Computer Science

Anssi Yli-Jyrä (Visiting researcher), Frank Drewes (Other role) & Henrik Björklund (Other role)

4 Nov 2019 → 6 Nov 2019

Logic Seminar Talk: Embedding Graphs to the String Space to Support Succinct Representation of Graph Properties

Anssi Yli-Jyrä (Speaker)

30 Oct 2019

Language Technology Seminar Talk: Transition-Based Coding and Formal Language Theory for Ordered Digraphs

Anssi Yli-Jyrä (Speaker)

24 Oct 2019

NoDaLiDa 2019 (Event)

Anssi Yli-Jyrä (Reviewer)

30 Sep 2019 → ...

International Conference on Finite State Methods and Natural Language Processing (Event)

Anssi Yli-Jyrä (Reviewer)

23 Sep 2019 → 25 Sep 2019

Lisbon Machine Learning School 2019

Anssi Yli-Jyrä (Attendee)

11 Jul 2019 → 18 Jul 2019

16th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology in 2019. Program Committee. (Event)

Anssi Yli-Jyrä (Reviewer)

2019

Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing (Event)

Anssi Yli-Jyrä (Reviewer)

2019 → ...

Linguistics vanguard : multimodal online journal (Journal)

Anssi Yli-Jyrä (Reviewer)

2019 → ...

Mathematics of Language: 16th Meeting of the Mathematics of Language (Event)

Anssi Yli-Jyrä (Reviewer)

2019 → ...

Galina Jiraskova

Anssi Yli-Jyrä (Host)

6 Dec 2018 → 13 Dec 2018

Embedding Properties of Graphs to the String Space (talk at the Hebrew University, Jerusalem)

Anssi Yli-Jyrä (Speaker)

7 Nov 2018

Computational Complexity and Recurrent Neural Networks – A New, Practical Perspective (talk at the Hebrew University, Jerusalem)

Anssi Yli-Jyrä (Speaker)

1 Nov 2018

The Rachel and Selim Benin School of Engineering and Computer Science, The Hebrew University of Jerusalem, Israel

Anssi Yli-Jyrä (Visiting researcher)

31 Oct 2018 → 16 Nov 2018

Invited talk in an international business meeting at Keymedia ry

Anssi Yli-Jyrä (Speaker)

27 Sep 2018

Adam Jardine

Anssi Yli-Jyrä (Host)

30 Jul 2018 → 5 Aug 2018

Henrik Björklund

Anssi Yli-Jyrä (Host)

25 Jun 2018 → 29 Jun 2018

Bruce Watson

Anssi Yli-Jyrä (Host)

3 Jun 2018 → 10 Jun 2018

András Kornai

Anssi Yli-Jyrä (Host)

25 May 2018 → 1 Jun 2018

Uliana Petrunina

Anssi Yli-Jyrä (Host) & Jack Michael Rueter (Host)

1 Feb 2018 → 1 Aug 2018

Razieh Ehsani

Anssi Yli-Jyrä (Host)

Feb 2018 → Jul 2018

Forgotten Islands of Regularity; Regular Universe of Language Models and Its Continuing Expansion

Anssi Yli-Jyrä (Speaker)

18 Dec 2017

Language and Linear Order

Anssi Yli-Jyrä (Speaker)

11 Dec 2017

MIT, Massachusetts Institute of Technology (MIT)

Anssi Yli-Jyrä (Visiting researcher)

7 Dec 2017 → 11 Dec 2017

Lexical Bits

Anssi Yli-Jyrä (Speaker)
5 Dec 2017

Towards a (formal) language theory of aligned multistrings and structured strings with relevance to linguistics and graphical annotations

Anssi Yli-Jyrä (Speaker)
17 Nov 2017

On Real-Time Graph Transducers

Anssi Yli-Jyrä (Speaker)
10 Nov 2017

Information Sciences Institute, University of Southern California, Los Angeles

Anssi Yli-Jyrä (Visiting researcher)
5 Oct 2017 → 6 Dec 2017

Finite-State Transducers as a Theory of Dependency Structured Natural Language

Anssi Yli-Jyrä (Speaker)
22 Sep 2017

A High Coverage (99.994%) Limit on Two-Sided Embedding in Universal Dependencies Treebanks

Anssi Yli-Jyrä (Speaker)
21 Sep 2017

International Joint Conference on Natural Language Processing (Event)

Anssi Yli-Jyrä (Reviewer)
12 Jul 2017 → 17 Aug 2017

The Power of Constraint Grammars Revisited

Anssi Yli-Jyrä (Speaker)
11 May 2017

Why a derivational model of discontinuous parsing is desirable?

Anssi Yli-Jyrä (Speaker)
16 Feb 2017

Finite-State Methods and Natural Language Processing (Event)

Anssi Yli-Jyrä (Reviewer)
2017 → ...

Mathematics of Language (Event)

Anssi Yli-Jyrä (Reviewer)
2017 → ...

The Annual Meeting of the Association for Computational Linguistics (Event)

Anssi Yli-Jyrä (Reviewer)
2017 → ...

BAULT Final Symposium

Anssi Yli-Jyrä (Attendee)
1 Dec 2016 → 2 Dec 2016

Inducing Grammatical Descriptions from Synchrony and Mismatch in Bitexts

Anssi Yli-Jyrä (Speaker)

1 Dec 2016

Edward Gibson

Anssi Yli-Jyrä (Host)

28 Nov 2016 → 4 Dec 2016

Swedish Language Technology Conference 2016 (Event)

Anssi Yli-Jyrä (Reviewer)

17 Nov 2016 → 18 Nov 2016

Towards a (formal) language theory of aligned multistrings and structured strings with relevance to linguistics and graphical annotations

Anssi Yli-Jyrä (Speaker)

17 Nov 2016

Towards a language theory of multistrings with relevance to linguistic structures and semantics

Anssi Yli-Jyrä (Speaker)

4 Nov 2016

Department of Computer Science, University of A Coruna

Anssi Yli-Jyrä (Visiting researcher)

1 Nov 2016 → 6 Nov 2016

Tallin University of Technology

Anssi Yli-Jyrä (Visiting researcher) & Hellis Tamm (Other role)

24 Sep 2016

Workshop on Multilingual and Cross-Lingual NLP

Anssi Yli-Jyrä (Attendee)

11 Feb 2016 → 12 Feb 2016

Laurette Pretorius

Anssi Yli-Jyrä (Host)

8 Feb 2016 → 20 Feb 2016

Journal of Language Modelling (Journal)

Anssi Yli-Jyrä (Reviewer)

2016 → ...

The Annual Meeting of the Association for Computational Linguistics (Event)

Anssi Yli-Jyrä (Reviewer)

2016 → ...

Hellis Tamm

Anssi Yli-Jyrä (Host)

Aug 2015 → Sep 2015

University of St. Andrews

Anssi Yli-Jyrä (Visiting researcher)

Aug 2015 → Sep 2015

Mathematics of Language 2015

Anssi Yli-Jyrä (Scientific Committee Member)
25 Jun 2015 → 26 Jun 2015

First International Workshop on Computational Linguistics for Uralic Languages

Anssi Yli-Jyrä (Scientific Committee Member)
16 Jan 2015 → ...

Supervising a project in Darmstadt

Anssi Yli-Jyrä (Participant)
Jan 2015 → Oct 2015

National Science Foundation, South Africa (External organisation)

Anssi Yli-Jyrä (Board member)
2015 → 2020

TU Darmstadt

Anssi Yli-Jyrä (Visiting lecturer)
20 Nov 2014 → Jan 2015

PhD Supervisor

Anssi Yli-Jyrä (Supervisor)
12 Nov 2014 → ...

7th International Conference on Software Language Engineering, SLE 2014

Anssi Yli-Jyrä (Attendee)
14 Sep 2014 → 15 Sep 2014

ESF Exploratory Workshop: Combining Learning And Symbolic Analysis For Software Documentation And Mastering Change

Anssi Yli-Jyrä (Speaker: Presenter)
10 Sep 2014 → 11 Sep 2014

The Phonetics Laboratory, University of Cambridge

Anssi Yli-Jyrä (Visiting researcher)
13 May 2014

Conference on Empirical Methods in Natural Language Processing (EMNLP) (Journal)

Anssi Yli-Jyrä (Reviewer)
7 May 2014 → 11 Jul 2014

Application for a Dagstuhl Perspectives Workshop

Anssi Yli-Jyrä (Attendee)
2014

Journal of Language Modelling (Journal)

Anssi Yli-Jyrä (Reviewer)
2014 → ...

Journal of Language Modelling (Journal)

Anssi Yli-Jyrä (Reviewer)
2014 → 2015

Member of the editorial board (Journal)

Anssi Yli-Jyrä (Programme Committee Member)
2014 → ...

Specialist Supervisor for Undergraduate Course "Artificial Intelligence II" at the University of Cambridge

Anssi Yli-Jyrä (Participant)
2014

University of St. Andrews (External organisation)

Anssi Yli-Jyrä (Assessment)
2014

The FASTAR and Espresso research groups, Stellenbosch University

Anssi Yli-Jyrä (Visiting researcher)
3 Nov 2013 → 9 Nov 2013

The annual meeting of the Association for Computational Linguistics (Journal)

Anssi Yli-Jyrä (Programme Committee Member)
31 Oct 2013 → 10 Apr 2014

Department of Engineering, University of Cambridge

Anssi Yli-Jyrä (Visiting researcher)
23 Sep 2013 → 30 Jun 2014

ACL 2013 tutorial

Anssi Yli-Jyrä (New classification)
4 Aug 2013

Clare Hall college, University of Cambridge

Anssi Yli-Jyrä (Visiting researcher)
1 Aug 2013 → 31 Jul 2014

Conference on Empirical Methods in Natural Language Processing (EMNLP) (Journal)

Anssi Yli-Jyrä (Programme Committee Member)
7 Jun 2013 → 21 Aug 2013

Research Community: "Building and Use of Language Technology (BAULT)" (External organisation)

Anssi Yli-Jyrä (Member)
2013 → ...

Riksbankens Jubileumsfond (External organisation)

Anssi Yli-Jyrä (Expert)
2013

Useita kansainvälisiä aikakauslehtiä (Journal)

Anssi Yli-Jyrä (Programme Committee Member)
2013 → ...

Proceedings of the FSMNLP (Journal)

Anssi Yli-Jyrä (Programme Committee Member)
20 Nov 2012 → 26 May 2013

Member of Program Committee of the 13th Meeting on the Mathematics of Language (Journal)

Anssi Yli-Jyrä (Programme Committee Member)

27 Oct 2012 → 27 May 2013

Paper reviewer for a conference (Journal)

Anssi Yli-Jyrä (Programme Committee Member)

15 Oct 2012 → 12 May 2013

Morphology (Journal)

Anssi Yli-Jyrä (Reviewer)

19 Jan 2012 → 29 Feb 2012

ACL Special Interest Group on Finite-State Methods (External organisation)

Anssi Yli-Jyrä (Member)

2012 → ...

Gradujen teon alkuvaiheen ohjaaminen - useita opiskelijoita

Anssi Yli-Jyrä (Supervisor)

2012 → 2013

Gradun ohjaus ja tarkastus

Anssi Yli-Jyrä (Other role (describe in more detail in "Relation description, notes" field))

2012 → 2013

Gradun ohjaus ja tarkistus

Anssi Yli-Jyrä (Other role (describe in more detail in "Relation description, notes" field))

2012 → 2013

HLT : International Conference on Human Language Technologies (Journal)

Anssi Yli-Jyrä (Programme Committee Member)

2012 → ...

Journal of Logic and Computation (Journal)

Anssi Yli-Jyrä (Reviewer)

2012 → ...

Proceedings of the FSMNLP (Journal)

Anssi Yli-Jyrä (Programme Committee Member)

2012 → ...

Recent Advances in Natural Language Processing 2011, September 12-14, 2011

Anssi Yli-Jyrä (Scientific Committee Member)

May 2011 → ...

Nordic Conference of Computational Linguistics (NODALIDA) (Journal)

Anssi Yli-Jyrä (Reviewer)

Mar 2011 → ...

CLARA (External organisation)

Anssi Yli-Jyrä (Chair)

2011 → 2012

Helmut Schmid

Anssi Yli-Jyrä (Host)

8 Aug 2010 → 23 Aug 2010

Session chair in the 11th Meeting of the ACL Special Interest Group in Computational Morphology, Phonology and Phonetics

Anssi Yli-Jyrä (Speaker: Chair)
15 Jul 2010

Supervisor of doctoral thesis in Language Technology / Miikka Silfverberg

Bo Krister Johan Linden (Supervisor) & Anssi Yli-Jyrä (Supervisor)
1 Jan 2010 → 22 Oct 2016

LANGET - the Finnish Graduate School in Language Studies (External organisation)

Anssi Yli-Jyrä (Expert member)
2010 → 2011

NRF (South Africa) (External organisation)

Anssi Yli-Jyrä (Expert)
2010

Supervisor and Evaluator for a Master's thesis

Anssi Yli-Jyrä (Supervisor)
2010 → Jun 2011

Supervisor of Ph.D. students (2)

Anssi Yli-Jyrä (Supervisor)
6 Nov 2009 → ...

D-Spin Workshop

Anssi Yli-Jyrä (Speaker: Presenter)
6 Sep 2009

the Association for Computational Linguistics Special Interest Group on Finite-State Methods (External organisation)

Anssi Yli-Jyrä (Chair)
2009 → 2012

Kutsuttu esitelmä Georgia Techissa

Anssi Yli-Jyrä (Speaker: Presenter)
14 Dec 2008

Natural Language Engineering (Journal)

Anssi Yli-Jyrä (Editor)
Dec 2008 → Dec 2010

Georgia Institute of Technology

Anssi Yli-Jyrä (Visiting researcher)
3 Nov 2008 → 14 Nov 2008

IOS PRESS (Publisher)

Anssi Yli-Jyrä (Member of editorial board)
1 Jan 2008 → 31 Dec 2008

International Workshop on Finite-State Methods and Natural Language Processing, FSMNLP 2009

Anssi Yli-Jyrä (Member of organizing committee)
2008 → 2010

Kainsainvälinen äärellistilaisten menetelmien ja luonnollisen kielen käsittelyn työpaja (External organisation)

Anssi Yli-Jyrä (Chair)
2008 → 2010

Language Technology Consultant

Anssi Yli-Jyrä (Participant)
2008 → ...

International Workshop on Finite-State Methods and Natural Language Processing, FSMNLP 2007

Anssi Yli-Jyrä (Speaker: Keynote)
14 Sep 2007 → 16 Sep 2007

Invited Lecture

Anssi Yli-Jyrä (Attendee)
10 May 2007

Budapest University of Technology and Economics

Anssi Yli-Jyrä (Visiting researcher)
2 May 2007 → 2 Jul 2007

Nordic Conference of Computational Linguistics (Journal)

Anssi Yli-Jyrä (Programme Committee Member)
1 Jan 2007 → 31 Dec 2007

LREC COCOSDA & Write workshop

Anssi Yli-Jyrä (Speaker: Presenter)
28 May 2006

Formal Grammar 2006

Anssi Yli-Jyrä (Scientific Committee Member)
2006 → ...

ICT Localisation Project of the Ministry of Education (External organisation)

Anssi Yli-Jyrä (Chair)
2006 → 2007

The Humanistic Faculty, University of Tromsø (External organisation)

Anssi Yli-Jyrä (Chair)
2006 → 2007

International Workshop on Finite-State Methods and Natural Language Processing, FSMNLP

Anssi Yli-Jyrä (Chair)
1 Sep 2005 → 2 Sep 2005

AWL 2005

Anssi Yli-Jyrä (Speaker: Presenter)
31 Aug 2005

Two-Level Morphology Day (TWOL Day). Applications and Problems of Finite-State Morphology in Less Studied Languages

Anssi Yli-Jyrä (Speaker: Presenter)
31 Aug 2005

Approaches to Complexity in Language 2005. 24-26 August 2005

Anssi Yli-Jyrä (Speaker: Presenter)

26 Aug 2005

International Journal of Foundations of Computer Science (Journal)

Anssi Yli-Jyrä (Reviewer)

Jan 2005 → Feb 2005

TWOLDAY

Anssi Yli-Jyrä (Member of organizing committee)

2005

ACL 2006, 2007; EACL 1999, 2008; FinTAL 2006; NoDaLiDa 2007; NoDaLiDa WS New Developments in CG 2009; Formal Grammar 2006; FSMNLP 2005, 2007, 2008, 2009 (External organisation)

Anssi Yli-Jyrä (Expert)

1999 → 2009

CALFAT Oy (External organisation)

Anssi Yli-Jyrä (Board member)

1998 → 2001

Press/Media

Projects

ADEQSYNTAX: A Usable Finite-State Model for Adequate Syntactic Complexity

Yli-Jyrä, A.

Suomen tietokirjailijat

01/09/2013 → 30/04/2019

PRE-ADEQSYNTAX: Applications of new finite-state techniques in syntactic and morphological parsing

Yli-Jyrä, A.

Suomen Akatemia

23/03/2007 → 31/12/2007

MORFCOMPILERS: Avoimet ja kieliriippumattomat automaattimenetelmät yhteisen kielentutkimusinfrastruktuurin resurssien tuottamiseksi

Yli-Jyrä, A.

Unknown funder

01/01/2009 → 31/12/2011

Building and use of language technology (BAULT)

Koskenniemi, K., Arppe, A., Carlson, L., Gurin, G., Hulden, M., Hurskainen, A., Huttunen, S., Jalava, L., Karlsson, F., Koponen, M., Kopotev, M., Lammi, A., Linden, K., Lindström, J., Mankila, A., Mustajoki, A. S., Nevalainen, T., Niemi, J., Nikunlassi, A., Nyrkkö, S., Parpola, A., Parpola, S., Piitulainen, J., Pirinen, T., Laitinen, H., Silfverberg, M., Vainio, M., Voutilainen, A., Yangarber, R., Yli-Jyrä, A., Leino, J. & Grünthal, R.

01/01/2005 → 31/12/2016

CSP-FSIG-TREES: Efficient Parsing with Finite-State Constraint Satisfaction

Yli-Jyrä, A., Koskenniemi, K. & Carlson, L.

01/01/2002 → 13/09/2005

ADEQSYNTAX-TRIAL2: Full Finite-State Syntax: Capturing Ambiguity and Crossing Dependencies with Minimal Descriptive Complexity

Yli-Jyrä, A.
17/10/2012 → 31/08/2013

HFST - Helsinki Finite-State Technology

Linden, K., Koskenniemi, K., Yli-Jyrä, A., Hulden, M., Silfverberg, M., Pirinen, T., Axelson, E., Hardwick, S., Niemi, J. & Hurskainen, A.
01/01/2005 → ...

SFST-HFST: Integration of Infrastructure Resources - Computational Morphology

Yli-Jyrä, A., Schmid, H. & Axelson, E.
Suomen Akatemia
07/04/2009 → 31/12/2010

LT4AFRICA: MDGs and African Language Technology: Roadmap to the Development of Bantu Language Resources

Yli-Jyrä, A., Killian, D., Valkama, M. & Hurskainen, A.
Suomen Akatemia
01/01/2010 → 31/12/2010

ADEQSYNTAX-TRIAL1: Path-Decomposed Accurate Dependency Analysis and Translation with Weighted Automata

Yli-Jyrä, A.
01/01/2011 → 01/01/2011

IELDSYNERGY-TRIAL: Rationalizing Parallel Linguistic Description and Computational Modeling

Yli-Jyrä, A.
01/01/2011 → 01/01/2011

FABC: The Finnish Analytical Bible Concordance Project

Yli-Jyrä, A.
01/01/1991 → 31/12/1997

Impacts

Bible Encyclopedia for Theologians

Anssi Yli-Jyrä (Participant)

Developed Methods for Language Technology Companies

Anssi Yli-Jyrä (Participant)

Development of Orthography and Writing Aids for Indigenous Languages having Grammatical Tone

Anssi Yli-Jyrä (Participant)

Graph Encoding Schemes for Syntactic and Semantic Labeling in Public Information Retrieval Infrastructures

Anssi Yli-Jyrä (Participant)

Datasets

HELFI – a Hebrew-Greek-Finnish Parallel Bible Corpus with Cross-Lingual Morpheme Alignment

Yli-Jyrä, A. (Creator) & Purhonen, J. (Editor), Helsingin yliopisto, May 2020
<https://github.com/amikael/HELFI> and one more link, <http://www.islrm.org/resources/840-665-876-625-0/> (show fewer)

HELFI::Finnish1938 - The Finnish 1933/1938 Bible Translation with lemmas, morphology and cross-lingual morpheme alignment

Yli-Jyrä, A. (Creator), Raamatun Tietokirja (RV / Aika / Aikamedia), May 2020

HELFI::Finnish1938::AIKA -- The AIKA Lemmas and Morphology

Yli-Jyrä, A. (Creator), Helsingin yliopisto, 2020

<https://github.com/amikael/HELFI/tree/master/Finnish1938/fi-FABC-2020m3-AIKA-morphology>

HELFI::Finnish1938::The Alignment Data of the HELFI Corpus Edition 2020.3 by the Finnish Analytical Bible Concordance Project of Aikamedia Oy

Yli-Jyrä, A. (Creator), Antturi, A. (Creator), Liljeqvist, M. (Creator), Rönttilä, K. M. (Creator) & Luoto, V. (Creator), Aika Oy Kristilliset Kirjat, May 2020

HELFI::Finnish1938::The FABC 2020.3 Text Edition -- The 2020.3 Text Edition of the 1933/1938 Finnish Bible Translation by the Finnish Analytical Bible Concordance Project

Yli-Jyrä, A. (Creator), Aikamedia, 2020

<https://github.com/amikael/HELFI/tree/master/Finnish1938/fi-FABC-2020m3>

HELFI::Greek1904 -- The Greek New Testament with Lemma and Morphology Data

Yli-Jyrä, A. (Editor), Sandborg-Petersen, U. (Editor), Robinson, M. A. (Editor), dos Santos, D. R. (Data Collector) & Nestle, E. (Creator), Helsingin yliopisto, 2020

<https://github.com/amikael/HELFI/tree/master/Greek1904>

HELFI::Hebrew1008 -- The Hebrew Bible with Lemma and Morphology Data

Yli-Jyrä, A. (Editor), Github, 2020

<https://github.com/amikael/HELFI/tree/master/Hebrew1008>

erme-ud-erzya

Rueter, J. (Creator), Tyers, F. M. (Contributor) & Yli-Jyrä, A. (Funder), Github, 20 Jan 2018

DOI: 10.5281/1156096, <https://github.com/rueter/erme-ud-erzya>