

CURRICULUM VITAE

Alon Lavie

Language Technologies Institute (LTI)
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PROFESSIONAL PREPARATION:

Technion - Israel Inst. of Tech.	Computer Science	B.A.	5/1987
Carnegie Mellon University	Computer Science	M.S.	5/1993
Carnegie Mellon University	Computer Science	Ph.D.	5/1996
Carnegie Mellon University	Language Technologies	Postdoc	9/1995-9/1996

APPOINTMENTS:

Safaba Translation Solutions, Inc. (www.safaba.com), 6/2009-present. Co-Founder, President and CTO. Initiated and spearheaded the launching of a technology start-up company focused on providing state-of-the-art machine translation solutions and services to global enterprises and commercial language service providers. Responsible for leading the company and developing the intellectual ideas and proprietary technology that drive the company. Further activities include securing investment capital, establishing business contacts with clients, partners, suppliers and investors, researching the market sector; recruiting senior personnel; and developing the company's business, sales and marketing strategies.

Carnegie Mellon University, Language Technologies Institute, 9/1995-present. **Research Professor** (7/2012-present), **Associate Research Professor** (7/2003-7/2012), **Research Scientist** (9/1996-7/2003), **Post-doctoral Fellow** (9/1995-9/1996). PI of **MT for Morphologically-Rich Languages** project (2009-2013, NSF), PI of **DKRLM** project (Discriminative Language Modeling for Machine Translation, 2007-2012, NSF); PI of **MEMT** project (2005-2010. Multi-Engine MT, DARPA/GALE). PI of **METEOR** project (2006-2009, learning high-accuracy evaluation metrics for NLP applications, NSF); PI of **GRASP** project (2004-2008, robust high-accuracy parsing of grammatical relations in databases of child-parent conversations, NSF); co-PI of **AVENUE** and **LETRAS** projects (2001-2010, machine translation for languages with limited amounts of resources, applied to MT for native languages of North and South America, NSF); co-PI of **milliRADD** project (2000-2002, machine translation with limited amounts of resources, DARPA TIDES); co-PI of **Nespole!** project (1999-2003, speech-to-speech translation of European languages, NSF); co-PI of **C-STAR** project (1995-1999, speech-to speech translation); co-PI of the **Clarity** project (1997-2000, detection of discourse structure in Spanish telephone conversations, DoD). Primary responsibilities include spearheading the research and development of machine translation approaches and methods in these projects and the integration of statistical and linguistic knowledge sources. With a particular area of expertise in parsing algorithms, spearhead research on robust language analysis using a combination of symbolic and statistical approaches. Other academic responsibilities include: the annual teaching/co-teaching of graduate level courses on Algorithms for NLP and Machine Translation, supervising lab courses on NLP and MT, and teaching occasional graduate level seminars; Advising/co-advising three current PhD students; Past advised graduates include six PhD and five MS students; Committee member on numerous PhD and MS dissertations, and serving as a member of the graduate program admissions committee and other departmental committees (hiring, finance, etc.).

FIVE MOST RELEVANT PUBLICATIONS:

[1] Lavie, A. and M. Denkowski. "The METEOR Metric for Automatic Evaluation of Machine Translation". *Machine Translation Journal*, 23 (2-3). 2009. Pages 105-115. DOI 10.1007/s10590-009-9059-4.

[2] Denkowski, M., C. Dyer, and A. Lavie. "Learning from Post-Editing: Online Model Adaptation for Statistical Machine Translation". In *Proceedings of the 14th Conference of the European Chapter of the Association for Computational Linguistics*, 2014.

[3] Clark, J. and A. Lavie. "Single System, Multiple Domain Adaptation via Feature Induction". In Proceedings of the Association for Machine Translation in the Americas, 2012.

[4] Hanneman, G. and A. Lavie. "Improving Syntax-Augmented Machine Translation by Coarsening the Label Set". In Proceedings of NAACL-HLT 2013, pages 288–297, Atlanta, GA, June 2013.

[5] K. Heafield, P. Koehn, and A. Lavie. "Grouping Language Model Boundary Words to Speed k-best Extraction from Hypergraphs". In Proceedings of NAACL-HLT 2013, pages 958–968, Atlanta, GA, June 2013.

OTHER SELECTED PAPERS AND PUBLICATIONS:

[6] Clark, J. H., C. Dyer, A. Lavie and N. A. Smith. "Better Hypothesis Testing for Statistical Machine Translation: Controlling for Optimizer Instability." In Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics (ACL-2011) – Short Paper. Portland, OR. June 2011. Pages 176-181.

[7] Dyer, C., J. H. Clark, A. Lavie and N. A. Smith. "Unsupervised Word Alignment with Arbitrary Features." In Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics (ACL-2011). Portland, OR. June 2011. Pages 409-419.

[8] Lavie, A., "Stat-XFER: A General Search-based Syntax-driven Framework for Machine Translation". Invited paper in *Proceedings of CICLing-2008*, Haifa, Israel, February 2008. Gelbuch (ed.), Computational Linguistics and Intelligent Text Processing, LNCS 4919, Springer. Pages 362-375.

[9] A. Matthews, A. Lavie, and C. Dyer. "A Bayesian Conditional Model for Sense Induction and Translation". In Transactions of the Association for Computational Linguistics, 2014.

SYNERGISTIC ACTIVITIES:

Member of ACL (Association for Computational Linguistics) and AMTA (Association for Machine Translation in the Americas). AMTA (Association for Machine Translation in the Americas) Counselor (2012-2014); President of AMTA (2009-2012); Member of AMTA Executive Board (2007-2008); President of ACL SIGParse (ACL special interest group on parsing, 2008-2012); General chair of AMTA-2012 and AMTA-2010 conferences; Program co-chair of AMTA-2006 conference; Local Arrangements Chair for NAACL-2001 conference; Editorial board member of Journal of Machine Translation; Frequent program committee member and/or reviewer for ACL, EMNLP, AMTA. COLING and IWPT conferences and frequent reviewer for a variety of other professional journals and conferences.

LIST OF COLLABORATING RESEARCHERS:

Dr. Bonnie Dorr (University of Maryland); Dr. Michel Galley (Microsoft); Dr. Nizar Habash (Columbia University); Dr. Rebecca Hwa (University of Pittsburgh); Dr. Jeremy Kahn (Google); Dr. Philipp Koehn (University of Edinburgh); Dr. Nitin Madnani (ETS); Dr. Christopher Manning (Stanford University); Dr. Mitchell Marcus (University of Pennsylvania); Dr. Mari Ostendorf (University of Washington); Dr. Sebastian Pado (University of Stuttgart); Dr. Brian Roark (Google); Dr. Salim Roukos (IBM); Dr. Richard Schwartz (BBN Raytheon); Dr. Matthew Snover (BBN Raytheon); Dr. Shuly Wintner (University of Haifa)

LIST OF GRADUATE AND POST-GRADUATE ADVISORS:

Dr. Masaru Tomita	Keio University, Japan
Dr. Jaime Carbonell	School of Computer Science, Carnegie Mellon University
Dr. Alex Waibel	School of Computer Science, Carnegie Mellon University

LIST OF ADVISED PHD STUDENTS:

Chad Langley, Kenji Sagae, Katherina Probst, Ariadna Font Llitjos, Christian Monson, Gregory Hanneman, Kenneth Heafield, Jonathan Clark, Michael Denkowski.