Koby Crammer - Curriculum Vitae

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Prof. Koby Crammer received a PhD (2004) in Computer science and BSc (1999) in mathematics, physics and computer science all from the Hebrew university Jerusalem and all Summa cum laude. He was a postdoctoral fellow and a research associate at the Department of Computer and Information Science, University of Pennsylvania between from 2004 to 2009. Koby joined the Department of Electrical Engineering at the Technion in 2009. He currently supervises eleven graduate students and cosupervises one post-dococtroal fellow. Eight students graduated under his supervision. Koby taught few times introductory and advanced courses in machine learning, including for international students in the Technion, and in an intentional school in Lisbon, and signal and systems course.

Koby published more than fifteen journal papers and seventy five conference papers in leading venues. He is an action editor of the editorial board of machine learning journal and journal of machine learning research, served in the program committee of leading conferences in machine learning and organized few international workshops. Recipient of the Rothschild fellowship, Fulbright fellowship (declined), Alon fellowship, Horev fellowship, and the Goldberg prize.

Koby research interests are in the design, analysis and study of machine learning and recognition methods and their application to real world data and especially natural language processing, big-complex datasets, and data analytics. His recent research interests are online learning, adaptive models, domain adaptation, multi-task learning, and contextual multi-armed bandits.

In the recent years Koby's research was funded by the Israeli Science Foundation (ISF), German Israeli Foundation (GIF), the European Commission (International Reintegration Grant, IRG), and the Israel ministry of economics. Koby was a member of an ICT-4, Seventh Framework Programme. His received also funding from Google, Yahoo, Intel, and Fujitsu.

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Publications (updated March 29, 2015)

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Publications

Google Scholar PoP h-index 30 and g-index 84.

Book Chapters

1. Koby Crammer, From Binary Classification to Categorical Prediction. In *Automatic Speech and Speaker Recognition: Large Margin and Kernel Methods*, Joseph Keshet and Samy Bengio, Eds., John Wiley & Sons, 2009.

Journals

- 1. Koby Crammer and Yoram Singer. On the Algorithmic Implementation of Multiclass Kernel-based Vector Machines. *Journal of Machine Learning Research* 2, 265-292, 2001.
- 2. Koby Crammer and Yoram Singer. On the Learnability and Design of Output Codes for Multiclass Problems. *Machine Learning* 47, 201-233, 2002.
- 3. Koby Crammer and Yoram Singer. A Family of Online Algorithms for Category Ranking. *Journal of Machine Learning Research* 3, 1025-1058, 2003.
- 4. Koby Crammer and Yoram Singer. Ultraconservative Online Algorithms for Multiclass Problems. *Journal of Machine Learning Research* 3, 951-991, 2003.
- 5. Koby Crammer and Yoram Singer Online Ranking by Projecting. *Neural Computation* 17(1), 145 175, January 2005.

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- 6. Koby Crammer, Ofer Dekel, Joseph Keshet, Shai Shalev-Shwartz and Yoram Singer. Online Passive-Aggressive Algorithms. *Journal of Machine Learning Research* 7, 551-585, 2006.
- 7. Axel Bernal, Koby Crammer, A. Hatzigeorgiou, and Fernando Pereira. Global Discriminative Learning for Higher-Accuracy Computational Gene Prediction. *PLoS Computational Biology* 3, March 2007.
- 8. Koby Crammer, Michael Kearns, and Jennifer Wortman. Learning from Multiple Related Data Sources. *Journal of Machine Learning Research* 9, 1757–1774, 2008.
- 9. Qian Liu, Koby Crammer, Fernando Pereira, and David S. Roos. Reranking Candidate Gene Models with Cross-Species Comparison for Improved Gene Prediction. *BMC Bioinformatics* 9:433, 2008.

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- 10. Shai Ben-David, John Blitzer, Koby Crammer, Alex Kulesza, Fernando Pereira and Jennifer Wortman. A Theory of Learning from Different Domains. *Machine Learning Journal*, Volume 79, Issue 1-2, May 2010.
- 11. Mark Dredze, Alex Kulesza and Koby Crammer. Multi-Domain Learning by Confidence-Weighted Parameter Combination . *Machine Learning Journal*, Volume 79 Issue 1-2, May 2010.
- 12. Axel Bernal, Koby Crammer and Fernando Pereira. Automated Gene-Model Curation using Global Discriminative Learning. *Bioinformatics*, April 2012

- 13. Koby Crammer, Mark Dredze and Fernando Pereira. Confidence-Weighted Linear Classification for Natural Language Processing. *JMLR* 13(Jun):1891–1926, 2012.
- 14. Zhuang Wang, Koby Crammer, and Slobodan Vucetic. Breaking the Curse of Kernelization: Budgeted Stochastic Gradient Descent for Large-Scale SVM Training. *JMLR* 13(Oct):3103-3131, 2012.
- 15. Koby Crammer and Claudio Gentile. Multiclass Classification with Bandit Feedback using Adaptive Regularization. *Machine Learning Journal*, Volume 90, Issue 3 (2013), Pages 347-383.
- 16. Koby Crammer, Alex Kulesza and Mark Dredze. Adaptive Regularization of Weights. *Machine Learning Journal*, Volume 91, Issue 2 (2013), Pages 155-187.
- 17. Edward Moroshko and Koby Crammer. Weighted Last-Step Min-Max Algorithm with Improved Sub-Logarithmic Regret. *TCS (Theoretical Computer Science)*, Volume 558 (2014), Pages 107-124.

Journal Papers Accepted for Publication

- 1. Francesco Orabona, Koby Crammer and Nicolo Cesa-Bianchi. A Generalized Online Mirror Descent with Applications to Classification and Regression. *Machine Learning Journal*, to appear.
- 2. Koby Crammer, Edward Moroshko and Nina Vaits. Second-Order Non-Stationary Online Learning for Regression. *Journal of Machine Learning Research*, to appear.

Submitted Journal Papers

1. Matan Orbach and Koby Crammer. TACO: Transduction Algorithm with Confidence. Submitted to *Machine Learning Journal*.

Refereed Conference Papers

- 1. Koby Crammer and Yoram Singer. On the Learnability and Design of Output Codes for Multiclass Problems. In *Proceedings of the Thirteen Annual Conference on Computational Learning Theory*, 2000.
- 2. Koby Crammer and Yoram Singer. Improved Output Coding for Classification Using Continuous Relaxation. In *Proceedings of the Thirteen Annual Conference on Neural Information Processing Systems*, 2000.
- 3. Koby Crammer and Yoram Singer. Ultraconservative Online Algorithms for Multiclass Problems. In *Proceedings of the Fourteenth Annual Conference on Computational Learning Theory*, 2001.
- 4. Koby Crammer and Yoram Singer. Pranking with Ranking. In *Proceedings of the Fourteenth Annual Conference on Neural Information Processing Systems*, 2001.
- 5. Koby Crammer and Yoram Singer. A New Family of Online Algorithms for Category Ranking. In *Proceedings* of the 25rd Conference on Research and Development in Information Retrieval (SIGIR), 2002.
- 6. Koby Crammer, Ran Gilad-Bachrach, Amir Navot and Naftali Tishby. Margin Analysis of the LVQ Algorithm. In *Proceedings of the Fifteenth Annual Conference on Neural Information Processing Systems* (NIPS), 2002.
- 7. Koby Crammer, Joseph Keshet and Yoram Singer. Kernel Design using Boosting. In *Proceedings of the Fifteenth Annual Conference on Neural Information Processing Systems* (NIPS), 2002.
- 8. Koby Crammer and Yoram Singer. Learning Algorithms for Enclosing Points in Bregmanian Balls. In *Proceedings of the Fifteenth Annual Conference on Computational Learning Theory* (COLT), 2003.
- 9. Koby Crammer, Jaz Kandola and Yoram Singer. Online Classification on a Budget. In *Proceedings of the Sixteenth Annual Conference on Neural Information Processing Systems* (NIPS), 2003.
- 10. Koby Crammer, Ofer Dekel, Shai Shalev-Shwartz and Yoram Singer. Online Passive-Aggressive Algorithms. In *Proceedings of the Sixteenth Annual Conference on Neural Information Processing Systems* (NIPS), 2003.
- 11. Koby Crammer and Gal Chechik. A Needle in a Haystack: Local One-Class Optimization. In *Proceedings of the Twenty-First International Conference on Machine Learning* (ICML), 2004.
- 12. Lavi Shpigelman, Koby Crammer, Rony Paz, Eilon Vaadia and Yoram Singer. A Temporal Kernel-Based Model for Tracking Hand-Movements from Neural Activities. In *Proceedings of the Seventeenth Annual Conference on Neural Information Processing Systems* (NIPS), 2004.

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Position at UPENN —

13. Koby Crammer and Yoram Singer. Loss Bounds for Online Category Ranking. In *Proceedings of the Eighteenth Annual Conference on Computational Learning Theory* (COLT), 2005.

- 14. Ryan McDonald, Koby Crammer and Fernando Pereira. Online Large-Margin Training of Dependency Parsers. In *Proceedings of the 43rd Annual Meeting of the Association for Computational Linguistics*, (ACL) 2005.
- 15. Ryan McDonald, Koby Crammer and Fernando Pereira. Flexible Text Segmentation with Structured Multilabel Classification. In *Processing of Human Language Technology Conference on Empirical Methods in Natural Language Processing*, 2005.
- 16. Koby Crammer, Michael Kearns, Jennifer Wortman Learning from Data of Variable Quality. In *Proceedings of the Eighteenth Annual Conference on Neural Information Processing Systems (NIPS)*, 2005.
- 17. Koby Crammer and Daniel D. Lee. Room Impulse Response Estimation Using Sparse Online Prediction and Absolute Loss. In *Proceedings of the IEEE International conference on Acoustics, Speech and Signal Processing*, 2006.
- 18. Koby Crammer. Online Tracking of Linear Subspaces. In *Proceedings of the 19th Annual Conference on Learning Theory*, 438-452, 2006.
- 19. Koby Crammer and Amir Globerson. Discriminative Learning via Semidefinite Probabilities. In *proceedings of Uncertainty in Artificial Intelligence* (UAI), 2006
- 20. Linli Xu, Koby Crammer, Dale Schuurmans. Robust Support Vector Machine Training via Convex Outlier Ablation. In *Proceedings of the Twenty-First National Conference on Artificial Intelligence*, 2006.
- 21. Shai Ben-David, John Blitzer, Koby Crammer, and Fernando Pereira. Analysis of Representations for Domain Adaptation. In *Advances in Neural Information Processing Systems 19*, 2006.
- 22. Koby Crammer, Michael Kearns, and Jennifer Wortman. Learning from Multiple Sources. In *Advances in Neural Information Processing Systems* 19, 2006.
- 23. Koby Crammer. A Conservative Aggressive Subspace Tracker. In *Proceedings of the 10th European Conference on Speech Communication and Technology* (Interspeech), 2007.
- 24. John Blitzer, Koby Crammer, Alex Kulesza, Fernando Pereira and Jennifer Wortman. Learning Bounds for Domain Adaptation. In *Advances in Neural Information Processing Systems* 20, 2007.
- 25. Mark Dredze, Koby Crammer and Fernando Pereira. Confidence-Weighted Linear Classification. In *International Conference on Machine Learning* 25, 2008.
- 26. Koby Crammer, Partha Pratim Talukdar and Fernando Pereira. A Rate-Distortion One-Class Model and its Applications to Clustering. In *International Conference on Machine Learning* 25, 2008.
- 27. Mark Dredze and Koby Crammer. Active Learning with Confidence. In Association for Computational Linguistics, 2008.
- 28. Partha Pratim Talukdar, Marie Jacob, Mohammad Salman Mehmood, Koby Crammer, Zack Ives, Fernando Pereira and Sudipto Guha. Learning to Create Data-Integrating Queries. In *Proceedings of the 34th International Conference on Very Large Databases*, VLDB 2008.
- 29. Ron Bekkerman and Koby Crammer. One-Class Clustering in the Text Domain. In *Conference on Empirical Methods in Natural Language Processing*, 2008.
- 30. Mark Dredze and Koby Crammer. Online Methods for Multi-Domain Learning and Adaptation. In *Conference on Empirical Methods in Natural Language Processing*, 2008.
- 31. Koby Crammer, Mark Dredze, Fernando Pereira. Exact Convex Confidence-Weighted Learning. In *Advances in Neural Information Processing Systems*, 2008.
- 32. Koby Crammer, Mehryar Mohri, Fernando Pereira. Gaussian Margin Machines. In *The proceedings of the twelfth International Conference on Artificial Intelligence and Statistics*, 2009.
- 33. Hui Lin, Jeff Bilmes and Koby Crammer. How to Loose Confidence: Probabilistic Linear Machines for Multiclass Classification. In Conference of the International Speech Communication Association (Interspeech), 2009.
- 34. Partha Pratim Talukdar and Koby Crammer. New Regularized Algorithms for Transductive Learning. In *European Conference on Machine Learning (ECML-PKDD)*, 2009.
- 35. Koby Crammer, Mark Dredze and Alex Kulesza. Multi-Class Confidence Weighted Algorithms. In *Empirical Methods in Natural Language Processing (EMNLP)*, 2009.

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- 36. Koby Crammer, Alex Kulesza and Mark Dredze. Adaptive Regularization Of Weight Vectors. In *Advances in Neural Information Processing Systems*, 2009.
- 37. Ted Sandler, Koby Crammer and Lyle H. Ungar. Resolving Identity Uncertainty with Learned Random Walks. *IEEE International Conference on Data Mining*, 2009.
- 38. Koby Crammer. Efficient online learning with individual learning-rates for Phoneme Sequence recognition. The

- 35th International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2010.
- 39. Justin Ma, Alex Kulesza, Mark Dredze, Koby Crammer, Lawrence K. Saul, and Fernando Pereira. Exploiting Feature Covariance in High-Dimensional Online Learning. *Proceedings of the International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2010.
- 40. Zhuang Wang, Koby Crammer, Slobodan Vucetic. Multi-Class Pegasos on a Budget. *Proceedings International Conference on Machine Learning (ICML)*, 2010, 1143-1150.
- 41. Koby Crammer, Eyal Even-Dar, Yishay Mansour, and Jennifer Wortman Vaughan. Regret Minimization with Concept Drift. *Proceedings of the the 23rd Annual Conference on Learning Theory (COLT)*, 2010, 168-180.
- 42. Paramveer Dhillon, Partha Pratim Talukdar, and Koby Crammer. Learning Better Data Representation using Inference-Driven Metric Learning. *Proceedings of the Annual Meeting of the Association for Computational Linguistics*, 2010.
- 43. Avihai Mejer and Koby Crammer. Confidence in Structured-Prediction using Confidence-Weighted Models. *Proceedings of the Conference on Empirical Methods in Natural Language Processing*, 2010, 971-981.
- 44. Francesco Orabona and Koby Crammer. New Adaptive Algorithms for Online Classification. *Proceedings of the Annual Conference on Neural Information Processing Systems (NIPS)*, 2010, 1840-1848.
- 45. Koby Crammer and Daniel D. Lee. Learning via Gaussian Herding. *Proceedings of the Annual Conference on Neural Information Processing Systems (NIPS)*, 2010, 451-459.
- 46. Zhuang Wang, Nemanja Djuric, Koby Crammer, Slobodan Vucetic. Trading Representability for Scalability: Adaptive Multi-Hyperplane Machine for Nonlinear Classification. ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD), 2011, 24-32.
- 47. Noam Slonim, Elad Yom-Tov, Koby Crammer. Active online classification via information maximization. *Proceedings of the 22nd International Joint Conference on Artificial Intelligence (IJCAI)*, 2011, 1498-1504.
- 48. Koby Crammer, Claudio Gentile. Multiclass classification with bandit feedback using adaptive regularization. *Proc. of the 26th International Conference on Machine Learning (ICML)*, 2011, 273-280.
- 49. Nina Vaits, Koby Crammer. Re-Adapting the Regularization of Weights for Non-Stationary Regression. *Proc. of the 22nd International Conference on Algorithmic Learning Theory (ALT)*, 2011, 114-128.
- 50. Roi Livni, Koby Crammer and Amir Globerson. A Simple Geometric Interpretation of SVM using Stochastic Adversaries. Proceedings of the 15th International Conference on Artificial Intelligence and Statistics (AISTATS), 2012.
- 51. Koby Crammer, Alex Kulesza and Mark Dredze. New H_{∞} Bounds for the Recursive Least Squares Algorithm Exploiting Input Structure. The 37th International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2012.
- 52. Koby Crammer and Daniel.D. Lee. Online Discriminative Learning of Phoneme Recognition via Collections of Generalized Linear Models. *The 37th International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2012.
- 53. Avihai Mejer and Koby Crammer. Are You Sure? Confidence in Prediction of Dependency Tree Edges. Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, 2012.
- 54. Avihai Mejer and Koby Crammer. Training Dependency Parser Using Light Feedback. Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, 2012.
- 55. Koby Crammer and Gal Chechik. Adaptive Regularization for Similarity Measures. ICML, 2012.
- 56. Hadas Benisty, David Malah and Koby Crammer. Modular Global Variance Enhancement for Voice Conversion Systems. *EUSIPCO*, 2012.
- 57. Matan Orbach and Koby Crammer. Graph Based Transduction with Confidence. ECML-PKDD, 2012.
- 58. Edward Moroshko and Koby Crammer. Weighted Last-Step Min-Max Algorithm with Improved Sub-Logarithmic Regret. *ALT*, 2012.
- 59. Koby Crammer and Tal Wagner. Volume Regularization for Binary Classification. NIPS, 2012.
- 60. Koby Crammer and Yishay Mansour. Learning Multiple Tasks using Shared Hypotheses. NIPS, 2012.
- 61. Yoav Haimovitch, Koby Crammer and Shie Mannor. More Is Better: Large Scale Partially-supervised Sentiment Classification *ACML*, 2012.
- 62. Matan Orbach and Koby Crammer. Transductive Phoneme Classification Using Local Scaling And Confidence. *IEEE 27-th Convention of Electrical and Electronics Engineers in Israel (IEEEI)*, 2012
- 63. Paramveer S. Dhillon, Partha Pratim Talukdar and Koby Crammer. Metric Learning for Graph-based Domain Adaptation. The 24th International Conference on Computational Linguistics (COLING), 2012.

- Edward Moroshko and Koby Crammer. A Last-Step Regression Algorithm for Non-Stationary Online Learning. AISTATS, 2013.
- 65. Noam Slonim, Ehud Aharoni and, Koby Crammer. Hartigan's *K*-means vs. Lloyd's *K*-means is it time for a change? *IJCAI*, 2013.
- 66. Ben Zion Vatashsky and Koby Crammer. Multi Class Learning with Individual Sparsity. IJCAI, 2013.
- 67. Yevgeny Seldin, Peter Bartlett, Koby Crammer and, Yasin Abbasi-Yadkori Prediction with Limited Advice and Multiarmed Bandits with Paid Observations. *ICML*, 2014.
- 68. Edward Moroshko and Koby Crammer. Selective Sampling with Drift . AISTATS, 2014.
- Asaf Noy and Koby Crammer. Robust Forward Algorithms via PAC-Bayes and Laplace Distributions. AISTATS, 2014.
- 70. Koby Crammer. Doubly Aggressive Selective Sampling Algorithms for Classification. AISTATS, 2014.
- 71. Hadas Benisty, David Malah, and Koby Crammer Non-Parallel Voice Conversion Using Joint Optimization of Alignment by Temporal Context and Spectral Distortion. *ICASSP*, 2014.
- 72. Maayan Harel, Shie Mannor, Ran El-Yaniv and, Koby Crammer. Concept Drift Detection Through Resampling. *ICML*, 2014.
- 73. Tor Lattimore, Koby Crammer and Csaba Szepesvari. Optimal Resource Allocation with Semi-Bandit Feedback. *UAI*, 2014. *Best Paper Runner-up Award*.
- 74. Haim Cohen and Koby Crammer. Learning Multiple Tasks in Parallel with a Shared Annotator. NIPS 2014.
- 75. Hadas Benisty and Koby Crammer. Metric Learning Using Labeled and Unlabeled Data for Semi-Supervised/Domain Adaptation Classification. *IEEE 28-th Convention of Electrical and Electronics Engineers in Israel (IEEEI)*, 2014.
- 76. Hadas Benisty, David Malah and Koby Crammer. Sequential Voice Conversion Using Grid-Based Approximation. *IEEE 28-th Convention of Electrical and Electronics Engineers in Israel (IEEEI)*, 2014.
- 77. Itamar Katz and Koby Crammer. Outlier-Robust Convex Segmentation. AAAI 2015, to appear.
- 78. Aviad Barzilay and Koby Crammer. Convex Multi-Task Learning by Clustering. AISTATS 2015, to appear.

Workshop Papers, Abstracts and Technical Reports

- Koby Crammer and Yoram Singer. A Family of Online Algorithms for Category Ranking. NIPS 2002 workshop: Beyond Classification and Regression; Learning Rankings, Preferences, Equality Predicates, and Other Structures, 2002.
- Koby Crammer and Yoram Singer. An Apparatus for General Discriminative Categorization with Kernel Machines. A Poster. Presented at the Sixteenth Annual Conference on Computational Learning Theory (COLT), 2003.
- 3. Koby Crammer and Noam Slonim. The Information-Bottleneck and data-representation: Bregman to the rescue. *NIPS 2003 workshop: Information Theory and Learning; The Bottleneck and Distortion Approach.*
- 4. Koby Crammer and Yoram Singer. Online Topic Ranking for Text Documents. A demonstration at the *Sixteenth Annual Conference on Neural Information Processing Systems* (NIPS), 2003.
- 5. Koby Crammer. Online Learning of Complex Categorical Problems. PhD Thesis, Hebrew University, 2004.
- 6. Ryan McDonald, Koby Crammer and Fernando Pereira. Large Margin Online Learning Algorithms for Structured Classification. *NIPS 2004 workshop: Learning With Structured Outputs Workshop.*
- 7. Koby Crammer, Ryan McDonald, and Fernando Pereira. New Large Margin Algorithms for Structured Prediction. NIPS 2004 workshop: Learning With Structured Outputs Workshop.
- 8. Koby Crammer, Ryan McDonald and Fernando Pereira. Scalable Large-Margin Online Learning for Structured Classification Technical Report. Department of Computer and Information Science, University of Pennsylvania, 2005.
- 9. Kuzman Ganchev, Koby Crammer, Fernando Pereira, Gideon Mann, Kedar Bellare, Andrew McCallum, Steven Carroll, Yang Jin, and Peter White. Penn/UMass/CHOP BiocreativeII Systems. In *Proceedings of the Biocreative II Workshop* p. 119 124, 2007.
- 10. Koby Crammer, Mark Dredze, Kuzman Ganchev, Partha Pratim Talukdar and Steven Carroll. Automatic Code Assignment to Medical Text. BioNLP 2007.
- 11. Partha Pratim Talukdar, John Blitzer, Ted Sandler, Mark Dredze, Koby Crammer and Fernando Pereira. DRASO: Declaratively Regularized Alternating Structural Optimization. ICML 2008 Workshop on Prior Knowledge for Text and Language Processing.
- 12. Koby Crammer, Eyal Even-Dar, Yishay Mansour and Jennifer Wortman. Regret Minimization with Concept

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- Drift. 3rd Annual Machine Learning Symposium, 2008
- Kedar Bellare, Koby Crammer and Dayne Freitag. Loss-Sensitive Discriminative Training of Machine Transliteration Models. NAACL Student Research Workshop poster, 2009.
 Sequence Learning from Data with Multiple Labels. ECML-PKDD 2009 workshop on Learning from Multi-Label Data (MLD), 2009
- 14. Confidence Estimation in Structured Prediction. Avihai Mejer and Koby Crammer. CCIT Report 798, 2011.
- 15. Sequential Voice Conversion Using Grid-Based Approximation. Hadas Benisty, David Malah, and Koby Crammer. CCIT Report 843, 2013.