

CONTACT INFO	http://www.di.ens.fr/~slacoste INRIA, 75013, Paris, France	
RESEARCH INTERESTS	Machine learning and statistics: structured prediction, optimization, graphical models. Applications: NLP, information retrieval, computer vision and computational biology.	
EDUCATION	<p>University of California, Berkeley, Berkeley, California, USA Ph.D. in Computer Science <i>Designated Emphasis in Communication, Computation and Statistics</i> Dissertation title: Discriminative Machine Learning with Structure Committee: Michael I. Jordan (chair), Peter L. Bartlett, Peter J. Bickel, Dan Klein Fall 2003 - Fall 2009.</p> <p>McGill University, Montréal, QC, Canada B.Sc. Triple Honours in Mathematics, Physics and Computer Science <i>First Class Honours in Math. & Physics, First Class Honours in Math. & CS</i> <i>Anne Molson Gold Medal</i> (best in math), <i>Dean's Honour List</i>, GPA 3.96/4.00 Fall 1999 - Spring 2003.</p>	
EMPLOYMENT	<p>École Normale Supérieure & INRIA, Paris, France Computer Science Department <i>Research in Paris Fellow</i> in SIERRA project team</p> <p>University of Cambridge, Cambridge, UK Department of Engineering <i>Research Associate</i> in Machine Learning Group</p>	<p>Sept 2011 – present</p> <p>Nov 2008 – Aug 2011</p>
AWARDS AND FELLOWSHIPS	<p>Research in Paris Fellowship, City of Paris - 2011–2012</p> <p>Wolfson College Junior Research Fellowship, University of Cambridge - 2009–2011</p> <p>UC Berkeley College of Engineering Graduate Student Prize (<i>for outstanding scholarship and achievement at the College of Engineering</i>) - 2008</p> <p>NSERC Postgraduate Scholarship (Canadian NSF) - 2005–2008</p> <p>NATEQ Scholarship (Québec NSF) - <i>Ranked first in the Mathematical Sciences competition</i> - 2003–2005</p> <p>Berkeley Graduate Fellowship - 2003–2004</p> <p>McGill Moyse Travelling Scholarship - <i>Only one awarded in the Faculty of Science of McGill University</i> - 2003</p> <p>Cornell, MIT and McGill fellowships (declined) - 2003</p> <p>At McGill University:</p> <p>Anne Molson Scholarship (for excellence in physics) - 2002</p> <p>Sir Edward Beatty Memorial Scholarship (for excellence in maths) - 2001 and 2002</p> <p>NSERC University Summer Research Scholarships - 2001–2003</p> <p>J.W. McConnell Entrance Scholarship - 1999–2003</p>	
REFEREED PUBLICATIONS	<p>S. Lacoste-Julien, F. Huszár and Z. Ghahramani. Approximate Inference for the Loss-Calibrated Bayesian. <i>Proceedings of the Fourteenth International Conference on Artificial Intelligence and Statistics (AISTATS)</i>, 2011.</p>	

S. Lacoste-Julien, F. Sha and M. Jordan. DiscLDA: Discriminative Learning for Dimensionality Reduction and Classification. *Advances in Neural Information Processing Systems (NIPS) 21*, MIT Press, 2009. 66 citations¹

S. Lacoste-Julien, B. Taskar, D. Klein and M. Jordan. Word Alignment via Quadratic Assignment. *Proceedings of the North American Chapter of the Association for Computational Linguistics Annual Meeting (HLT-NAACL)*, 2006. 48 citations

B. Taskar, **S. Lacoste-Julien** and M. Jordan. Structured Prediction, Dual Extragradient and Bregman Projections. *Journal of Machine Learning Research (JMLR)*, 7:1627-1653, 2006. 61 citations

B. Taskar, **S. Lacoste-Julien** and M. Jordan. Structured Prediction via the Extragradient Method. *Advances in Neural Information Processing Systems (NIPS) 18*, MIT Press, 2006. 42 citations

B. Taskar, **S. Lacoste-Julien** and D. Klein. A Discriminative Matching Approach to Word Alignment, *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2005. 113 citations

S. Lacoste-Julien, H. Vangheluwe, J. de Lara and P. Mosterman. Meta-Modelling Hybrid Formalisms. *IEEE International Symposium on Computer-Aided Control System Design (CACSD)*, IEEE Computer Society Press, 2004.

MANUSCRIPTS **S. Lacoste-Julien**, K. Palla, A. Davies, G. Kasneci, T. Graepel and Z. Ghahramani. Aligning Large-Scale Knowledge Bases.

J.P. Cunningham, P. Hennig and **S. Lacoste-Julien**. Approximate Gaussian Integration using Expectation Propagation. arXiv:1111.6832v1, 2011.

F. Huszár and **S. Lacoste-Julien**. A Kernel Approach to Tractable Bayesian Non-parametrics. arXiv:1103.1761v3, 2011.

THESIS **S. Lacoste-Julien**. Discriminative Machine Learning with Structure. Ph.D. Thesis, Computer Science Division, University of California, Berkeley, 2009.

WORKSHOP PAPERS **S. Lacoste-Julien** and Z. Ghahramani. Approximate Inference for the Loss-Calibrated Bayesian. *Ninth Valencia International Meeting on Bayesian Statistics*, Valencia, Spain, 2010.

S. Lacoste-Julien, F. Sha and M. Jordan. Conditionally Trained Latent Dirichlet Allocation for Text Modeling and Categorization. *Learning Workshop*, Snowbird, UT, USA, 2008.

S. Lacoste-Julien, B. Taskar, D. Klein and M. Jordan. Word Alignment via Quadratic Assignment. *Advances in Structured Learning for Text and Speech Processing Workshop*, NIPS, Whistler, BC, Canada, 2005.

RESEARCH EXPERIENCE **École Normale Supérieure & INRIA**, Paris, France
 SIERRA project team
Research in Paris Fellow Sept 2011 – present
 Machine learning research in collaboration with Francis Bach.

University of Cambridge, Cambridge, UK
 Machine Learning Group
Research Associate Nov 2008 – Aug 2011
 Machine learning research in collaboration with Prof. Zoubin Ghahramani.

¹Citation counts from Google Scholar. Around 350 total citations as of December 2011.

University of California, Berkeley, Berkeley, CA, USA
Statistical Artificial Intelligence Laboratory (SAIL)
Graduate Student Researcher July 2003 – Oct 2008
Machine learning research in collaboration with Prof. Michael Jordan and Prof. Dan Klein.

Yahoo! Research, Santa Clara, CA, USA
Intern May 2006 – August 2006
Machine learning research under the supervision of Andrew Tomkins and Vanja Josifovski.

Helsinki Institute of Information Technology, Helsinki, Finland
Complex Systems Computation Group
Invited Researcher May 2004 – June 2004, August 2005
Collaborated on the Next Generation Information Retrieval project with Wray Buntine and Henry Tirri.

McGill University, Montréal, QC, Canada
Modelling, Simulation and Design Laboratory (MSDL)
Undergraduate researcher May 2002 – August 2002
Research on Hybrid Systems modelling and simulation with Prof. Hans Vangheluwe.

McGill University, Montréal, QC, Canada
Reasoning and Learning Laboratory
Undergraduate researcher May 2001 – August 2001
Research on Delay Differential Equations with Prof. Prakash Panangaden.

TEACHING
EXPERIENCE

University of California, Berkeley, Berkeley, CA, USA

Graduate student instructor for Computer Science 188, Fall 2007 - Artificial Intelligence (undergraduate course) - Gave weekly section and designed homework. Students graded my “overall teaching effectiveness” at 4.3/5.0.

Head graduate student instructor for Computer Science 294-10, Fall 2006 - Practical Machine Learning (graduate course) - Designed and gave one lecture, as well as ensured continuity of the class (taught by 15 different grad students) with projects, assignments, etc. - Guest lecturer also in Spring 2008.

Graduate student instructor for Computer Science 281a, Fall 2005 - Statistical Learning Theory (graduate course) - Gave weekly section.

McGill University, Montréal, QC, Canada

Mathematics Helpdesk Tutor in 2002–2003 - I did one-on-one tutoring on any undergraduate mathematics topic.

Teaching assistant for Mathematics 266A, Fall 2000 - Linear Algebra and Boundary Value Problems (undergraduate class) - Gave weekly section.

Teaching assistant for Mathematics 265C, Summer 2000 - Advanced Calculus (undergraduate class) - Gave biweekly section.

INVITED
TALKS

2011 Statistical Laboratory, University of Cambridge, Cambridge, UK

2010 Department of Computer Science, McGill University, Montréal, QC, Canada

Computer and Inform. Science Dep., Univ. of Pennsylvania, Philadelphia, PA, USA
Machine Learning Department, Carnegie Mellon University, Pittsburgh, PA, USA

2009 Machine Learning and Perception Group, Microsoft Research Cambridge, UK
 Service Innovation Laboratory, Xerox Research Centre Europe, Grenoble, France

2008 Machine Learning Department, Carnegie Mellon University, Pittsburgh, PA, USA
 Dept. of Computer Science, University of Toronto, Toronto, ON, Canada
 Dept. of Computer Science, McGill University, Montréal, QC, Canada
 Computational and Bio. Learning Lab., University of Cambridge, Cambridge, UK

CONFERENCE
 AND
 WORKSHOP
 PRESENTATIONS

2011 Conference on Artificial Intelligence and Statistics, Ft. Lauderdale, FL, USA (poster)

2010 International Society for Bayesian Statistics World Meeting, Bedinorm, Spain (talk)
 The Learning Workshop, Snowbird, UT, USA (poster)

2009 **Organizer of workshop on *The Generative and Discriminative Learning Interface* at Neural Information Processing Systems conference**, Whistler, BC, Canada

2008 Neural Information Processing Systems conference, Vancouver, BC, Canada (poster)
 Workshop on Algorithms for Modern Massive Data Sets, Palo Alto, CA, USA (poster)
 The Learning Workshop, Snowbird, UT, USA (talk)

2007 RAD Lab Retreat, Santa Cruz, CA, USA (talk)

2006 North American chapter of the Association for Computational Linguistics annual meeting, New York, NY, USA (talk)

2005 Workshop on *Advances in Structured Learning for Text and Speech Processing*, Neural Information Processing Systems conference, Whistler, BC, Canada (talk)

ACADEMIC
 SERVICE

Reviewer for:
 Journal of Machine Learning Research (JMLR)
 IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
 Machine Learning
 IEEE Transactions on Knowledge and Data Engineering (TKDE)
 International Journal of Computer Vision (IJCV)
 Neural Information Processing Systems (NIPS)
 Uncertainty in Artificial Intelligence (UAI) – and **Senior PC member**
 International Conference of Machine Learning (ICML)
 International Conference on AI and Statistics (AISTATS)
 International Joint Conference on AI (IJCAI)
 Conference on Empirical Methods in Natural Language Processing (EMNLP)

Service at University of Cambridge:
 Elected member of the Wolfson College Council 2010–2011
 Member of the Fellowship and Membership Committee, Wolfson College 2011
 VP communication of Postdocs Of Cambridge (PdOC), 2009–2011
 PASCAL EU Network of Excellence **grant manager** 2009–2011

Departmental service at UC Berkeley:
 Computer Science Graduate Student Association (CSGSA) Visit Day Committee, 2006–2007
 Student member of Graduate Admission Committee, 2006–2007
 Chair of CSGSA Faculty Candidate Committee, 2006
 Head of CSGSA Orientation Committee, 2004

LANGUAGES

French	Native speaker
English	Fluent
Spanish	Intermediate
German	Beginner
Programming	Matlab, Python, C, Java, Unix shell