

Arseni V. Seregin

CONTACT INFORMATION	University of Washington Department of Statistics Box 354322 Seattle, WA 98195-4322	<i>Phone:</i> (303) 775-4024 <i>E-mail:</i> arseni@stat.washington.edu <i>www:</i> http://www.stat.washington.edu/arseni
RESEARCH INTERESTS	Multivariate shape-constrained density estimation, empirical processes, algebraic statistics, machine learning and statistical pattern recognition, stochastic modeling and computational finance.	
EDUCATION	University of Washington , Department of Statistics, Seattle, WA <i>Ph.D. candidate, Statistics</i> September, 2006 - present Graduate coursework includes advanced theoretical statistics, probability theory, stochastic modeling, optimization theory. Stanford University , Center for Professional Development, Stanford, CA <i>Graduate certificate</i> January, 2005 - December 2005 Completed “Quantitative methods in finance and Risk management” program. Moscow State University , Department of Mathematics and Mechanics, Moscow, Russia <i>M.S., Mathematics (Algebra)</i> September, 1992 - June 1997 Diploma with Honors, GPA 4.0.	
PROFESSIONAL EXPERIENCE	University of Washington , Department of Statistics, Seattle, WA <i>Research Assistant</i> January, 2007 - present Prof Jon A. Wellner, NSF Grant ‘Statistical Inverse Problems, Semiparametric Models, and Empirical Processes’. Parascript, LLC , R&D Department, Boulder, CO <i>Senior Software Engineer</i> January, 2002 - July, 2006 Project leader of incoming mail sorting software development (<i>InMailRouter</i> TM). Supervisor of check layout verification and fraud detection software development (<i>CheckStockXpert</i> TM) <i>Staff Engineer</i> January, 1999 - December, 2001 Designed and developed algorithms: full name and company name recognition, name matching for postal forwarding recognition, voting for ensembles of classifiers. Participated in design and implementation of a new handwriting recognition engine. <i>Scientific Researcher</i> , Moscow office June, 1997 - December, 1998 Implemented optimization algorithms in machine learning software. Participated in ongoing research in word recognition and image processing.	
TEACHING EXPERIENCE	University of Washington , Department of Statistics, Seattle, WA <i>Teaching assistant</i> Fall, 2009 Advanced Theory of Statistical Inference (STAT 581)	

PUBLICATIONS

1. A. Seregin, J. A. Wellner, *Nonparametric estimation of convex-transformed densities*, in preparation, (2009).
2. V. Minin, J. O'Brien, and A. Seregin, *Empirically corrected estimation of complete data population summaries under model misspecification*, submitted to J. R. Stat. Soc. Ser. B Stat. Methodol. (2009), arXiv:0911.0930.
3. F. Balabdaoui, H. K. Jankowski, M. Pavlides, A. Seregin, and J. A. Wellner, *On the Grenander estimator at zero*, Statist. Sinica (2009), accepted, arXiv:0902.4453.
4. A. A. Mikhalev, A. V. Sereguine, *Standard bases of left ideals of P-type algebras*, Algebras and Combinatorics (Hong Kong, 1997), 345-353, Springer, Singapore, 1999.
5. A. V. Seregin, *On some properties of Lie algebras with cohomological dimension one*, Fundame. Prikl. Mat. 4 (1998), no. 2 (in russian).

PATENTS

A. Filatov, I. Kil and A. Seregin, *Holistic-Analytical Recognition of Handwritten Text*, U.S. Patent 6,950,555, European Patent EP 1362322.

AWARDS

Z.W. Birnbaum award for outstanding general exam, University of Washington (2009)
 Mikhail Lomonosov Fellowship for Academic Excellence, Moscow State University (1995-1997).
 Soros Student Grants, 1993, 1996

TALKS

Mathematisches Forschungsinstitut Oberwolfach **August 2009**
 Workshop: Challenges in Statistical Theory: Complex Data Structures and Algorithmic Optimization.

Banff International Research Station **June 2009**
 Workshop: Advances in Stochastic Inequalities and their Applications.

University of Washington **May 2009**
 UW Optimization Seminar.