

Andreas Artemiou

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Date of birth: March, 11th, 1981

Citizenship: Cyprus

Nationality: Cyprus (Greek-Cypriot)

Current Position:

- Since August 2010: Tenure track Assistant Professor of Statistics, Department of Mathematical Sciences, Michigan Technological University.

Studies:

- Ph.D. in Statistics, Pennsylvania State University, August 2010
 - Dissertation title: “**Topics on Supervised and Unsupervised dimension reduction**” under the supervision of Professor Bing Li
- M.Sc. in Statistics, Pennsylvania State University, May 2008
 - Master thesis: “**Principal Components and regression: A probabilistic explanation of a natural phenomenon**” under the supervision of Professor Bing Li
- B.Sc. in Mathematics and Statistics with a minor in Computer Science, University of Cyprus (2001 – 2005)
 - B.Sc. Final project: “**Biostatistical analysis of interval censored and truncated data in frailty models**” under the supervision of Prof. Filia Vonta.

Research Interests:

- Sufficient Dimension Reduction.
- Unsupervised Dimension reduction.
- Kernel methods
- Data mining / Support Vector Machines

- Statistical / Machine Learning
- Applications of Dimension reduction techniques in other Sciences

Publications:

- Andreas Artemiou and Bing Li (2009), “On principal components and regression: A statistical explanation of a natural phenomenon”, *Statistica Sinica*, 19, 1557-1565.
- Filia Vonta and Andreas Artemiou (2007), “Hypothesis testing in frailty models for arbitrary censored and truncated data”, *CDQM*, 10(1): 110-121

Accepted (to appear):

- *Shrivastava, S. K., Artemiou, A. and Minerick, A. R. “DC insulator-based dielectrophoretic characterization of erythrocytes: ABO-Rh human blood typing” (Electrophoresis, submitted January 2011, revision requested March 2011, resubmitted May 2011, accepted June 2011)*

Under revision:

- *Bing Li, Andreas Artemiou, Lexin Li “On hyperplane alignment for linear and nonlinear sufficient dimension reduction” (Annals of Statistics, submitted October 2010, revision requested January 2011, resubmitted June 2011)*
- *Gately Matthew, Andreas Artemiou “How secure our thumbs are?” (submitted April 2011 – Chance magazine, revision requested July 2011)*

In preparation:

- Bing Li and Andreas Artemiou, “On the predictive potential of kernel principal components”, in preparation.
- Andreas Artemiou and Bing Li, “Principal components and regression: Beyond the linear model predictability of principal components”, in preparation

Conference Talks/Posters:

- Joint Statistical Meeting 2011. *Contributed Talk*: “Hyperplane Alignment for sufficient dimension reduction: Implementation, application, and advantages”, Miami, FL.
- Greek Statistical meeting 2011. *Invited Talk*: “Hyperplane Alignment for sufficient dimension reduction: Implementation, application, and advantages”, Patra, Greece
- Gordon Research Conferences on Quantitative Genomics 2011 “Applications of hyperplane alignment on biological datasets”, Galveston, Texas
- Joint Statistical Meeting 2010. *Contributed Talk*: “On the predictive potential of kernel principal components”, Vancouver, Canada
- Joint Statistical Meeting 2009. *Contributed Poster*: “An inequality on principal components and regression”, Washington D.C.
- Joint Statistical Meeting 2008. *Contributed Talk*: “On principal components and regression: A statistical explanation of a natural phenomenon”, Denver, CO.

Other Invited Talks:

- Department of Statistics, London School of Economics, March 2010
- Department of Statistics, Oklahoma State University, February 2010
- Department of Mathematical Sciences, Michigan Technological University, January, 2010

Other Research Talks:

- Alumni Workshop, Pennsylvania State University, March 2010

Teaching Experience:

Michigan Tech, Department of Mathematical Sciences:

- Fall 2010, Spring 2011, Fall 2011: MA3710: Engineering Statistics
- Fall 2010, Fall 2011: MA5761: Computational Statistics

Instructor at Penn State:

- Summer 2007, Summer 2008, Summer 2010: Instructor for “STAT 200: Elementary Statistics”, Pennsylvania State University, Department of Statistics.
- Fall 2007, Fall 2008, Fall 2009: Instructor for “STAT 318: Introduction to Probability”, Pennsylvania State University, Department of Statistics
- Fall 2006, Spring 2007, Spring 2008, Spring 2009, Spring 2010: Instructor for “STAT 319: Mathematical Statistics for Sciences”, Pennsylvania State University, Department of Statistics.

Teaching Assistant:

- Fall 2005 – Spring 2006 – Summer 2006: Teaching Assistant Duties General Education Courses: STAT 100 – STAT 200. Pennsylvania State University, Department of Statistics.

Funding Awards:

- Michigan Technological University, startup fund (2010): ~\$69000.
- 2010 William Harkness Graduate Student Travel Award \$900 to attend JSM 2010, Vancouver, CA. Awarded by the Department of Statistics, Pennsylvania State University.
- 2009 William Harkness Graduate Student Travel Award \$750 to attend “New Directions in Asymptotic Statistics, Athens, GA. Awarded by Department of Statistics, Pennsylvania State University.
- 2008 William Harkness Graduate Student Travel Award \$950 to attend JSM 2008, Denver, CO. Awarded by Department of Statistics, Pennsylvania State University.

Research/Academic Awards:

- Eleneio Dissertation Award, to “the best dissertation written by a Greek statistician in Greece or abroad on Statistics for the two year period 2009-2010”, Greek Statistical Institute, April 2011.
- Award of the AC-Nielsen as the University of Cyprus, Department of Mathematics and Statistics, graduating student who has better used the theory of statistics in applied experiments, June 2005.

- Award of the Computer Science minor program as the Graduating student with the highest GPA in the Computer Science minor program, June 2005.
- Honorable Mention (4th place) in the National Contest “Research for undergraduate students” organized by the Cyprus Research Promotion Organization (2004)
- Award for my excellent research work in Robotics from the Computer Science Department of the University of Cyprus (2003).

Teaching Awards:

- William L. Harkness Teaching Award, for “excellent preparation and commitment to teaching for the academic year 2007 – 2008”, Department of Statistics, Pennsylvania State University (August 2008)

Professional Development:

- Spring 2011: Completed Online Course “99ITCG IT Compliance General Training” offered by Michigan Technological University
- Spring 2011:
 - Research Workshops at Michigan Technological University
 - “Confidentiality”
 - “Reading Account Statements/Payroll Reallocation”
 - “NSF CAREER grants” (full-day)
- Fall 2010:
 - Research Workshops at Michigan Technological University
 - “Proposal Processing”
 - “National Institute of Health Grants”
 - “Conflict of Interest”
 - “Strategies for Identifying Funding”
 - “National Security Research”
 - “Proposal/Grant Writing”
 - Teaching Workshops at Michigan Technological University
 - “How to build technological teaching strategies”
- Fall 2010: Completed a 3 week online course “OL 2000: Effective Online Teaching” offered by the World Campus at Pennsylvania State University.

- Spring 2009: Completed an 8 week course on College Teaching offered by the Schreyer Institute for Teaching Excellence at the Pennsylvania State University.

Professional Organizations membership:

- IMS: Institute of Mathematical Statistics
- ASA: American Statistical Association
- ESI: Greek Statistical Institute (Elliniko Statistiko Institutoto)

Other Professional Activities:

- Reviewer for academic Journals:
 - Statistica Sinica
 - Open Journal of Statistics
- Reviewer for the Proceedings of the Greek Statistical Institute meetings

Department and University wide committees/service:

- Michigan Technological University
 - Department of Mathematical Sciences
 - Fall 2010 – Spring 2011: Undergraduate student committee
 - January 2011, September 2011: Statistics Qualifier Exam
- Pennsylvania State University:
 - Eberly School of Science:
 - Graduate student representative in the Eberly School of Science Committee of Climate and Diversity (September 2006 – May 2009), Department of Statistics, Pennsylvania State University
 - Department of Statistics:
 - Member of the Student Advisory Committee (2005, 2006), Department of Statistics, Pennsylvania State University
- University of Cyprus:
 - University wide:

- Elected to be the student representative in the University wide Committee of Public and International Affairs since June 2002 until March 2005, University of Cyprus
- Elected to be the student representative in the University wide E-learning Committee since September 2003 until March 2005, University of Cyprus
- Elected for three years (2002/2003/2004) as a member of the University Student Union's Council, University of Cyprus.
- Department of Mathematics and Statistics:
 - Elected for two years (2002/2004) to be a student representative in the Department's Council, University of Cyprus

Statistical Consulting Experience:

- Two semesters (9 months) as a required practice at the Statistical Consulting Center, Department of Statistics, Pennsylvania State University. Work on projects (with real datasets) from different areas:
 - Ecology (MANOVA – Minitab)
 - Education (T-test, Chi-Square test, Factor Analysis - SPSS)
 - Forensic Sciences (ANOVA, Time Series – Minitab)
 - Forest Resources (Mixed Models, Logistic Models – SAS)
 - Forest Resources (Chi-Square for equality of proportions, Logistic Regression – SPSS)
 - History and Archaeology (Clustering Techniques - SPSS)
 - Information Science and Technology (Model Fitting, Model Selection, ANOVA – SAS)
 - Psychology (Split Split Split Plot Designs, Mixed Models - SPSS)

Other Work Experience:

- Summer 2009: Research Assistant, Department of Statistics, Pennsylvania State University (Profs Francesca Chiaromonte, Jenni Evans)
- August 2004 - October 2005: Researcher - Special Scientist in the Computer Architecture Lab, University of Cyprus (Prof. Yanos Sazeides)

- July 1999-September 2001: Served in the Army as a second-lieutenant.

Computing Languages:

- Excellent knowledge in Programming in C, Fortran, R
- Average knowledge of C++ and Java programming
- Familiar with Software like Matlab, Mathematica, Minitab, SPSS, SAS

References:

- Professor Bing Li (bing@stat.psu.edu)
- Professor Francesca Chiaromonte (chiaro@stat.psu.edu)
- Professor Michael Akritas (mga@stat.psu.edu)
- Professor James Rosenberger (jlr@psu.edu)

All the above Professors have the following mailing address:

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Last updated: August 28th, 2011.