

# ERIC ALAN VANCE

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## Education

- **Duke University**—Durham, NC  
*Ph.D. candidate in Statistical Science (expected May 2008)* 2002-present  
*M.S. in Statistics & Decision Sciences* 2005  
James B. Duke Fellowship
- **University of California, Berkeley**—Berkeley, CA  
*B.A. in Mathematics; Economics; and Statistics (triple major)* 1993-1997  
Dean's Honors List, National Merit Scholar

## Experience

- **Statistical Consultant**—Statistical Education and Consulting Center, Duke University
  - Numerous short-term projects in biology, ecology, neuroscience, biomedical engineering, medicine, business administration, psychology, and other fields 2005-present
  - Collaboration with Julie Hollister-Smith and Susan Alberts analyzing male elephant paternity success 2005-2006
  - Collaboration with Elizabeth Archie analyzing female elephant social structure and reproductive success 2004-2006
- **Instructor**—Duke University  
*STA101: Introductory Statistics*
  - Created lectures, labs, homeworks, and exams for 20 students Summer 2004
  - Created lectures, labs, homeworks, and exams for 17 students Summer 2003
- **Summer Manager**—AT&T Research Labs; Florham Park, NJ
  - Change Detection in Multivariate Data; Models for Dynamic Networks Summer 2006
- **Research Assistant**—SAMSI; Durham, NC
  - National Defense and Homeland Security 2005-2006
  - Latent Variable Models in the Social Sciences Summer 2005
  - Multiscale Modeling Spring 2004
  - Data Mining Fall 2003
- **Teaching Assistant**—Department of Statistical Science, Duke University
  - *STA205: Probability/Measure Theory*; Professor Robert Wolpert Spring 2008
  - *STA101: Introductory Statistics* Spring 2007  
As Head TA managed 12 TAs for Professors Banks, Stangl, and Cheng
  - *STA101: Introductory Statistics*; Professor Ricky Rambharat Summer 2005
  - *STA113: Statistics for Engineers*; Professor Ian Dinwoodie Spring 2005
  - *STA214: Probability/Stat Models*; Professor Mike West Fall 2004
  - *STA216: Generalized Linear Models*; Professor David Dunson Fall 2004, 2007

- **Graduate and Professional Student Council**—Duke University
  - Representative to the General Assembly 2003-2007
  - Member of the Board of Trustees Undergraduate Affairs Committee 2006-present
  - Vocal member of the Student Health Insurance Advisory Committee 2005-present
  - Member and chair of the Young Trustee Screening Committee 2004-2007
  - Basketball Committee Grounds and Lottery co-chair 2004-2007
  - GPSC rep on the Academic Council Student Affairs Committee 2006-present
  - GPSC Social Committee 2003-2005
  - Student Services Committee 2005-2006
  - NAGPS Legislative Action Day 2004
- **Member of Technical Staff**—TRW, Inc.; Redondo Beach, CA
  - Evaluated and reported on vendor presentations for firewalls Summer 1996
- **Landscaper**—Kohler Company; Kohler, WI  
Summer 1995

## Publications and Presentations

- Eric A. Vance, Elizabeth A. Archie, and Cynthia J. Moss, "Social Networks in African Elephants", *Computational and Mathematical Organization Theory*, (in review).
- Julie A. Hollister-Smith, Joyce H. Poole, Elizabeth A. Archie, Eric A. Vance, Nicholas J. Georgiadis, Cynthia J. Moss and Susan C. Alberts, "Age, musth and paternity success in wild male African elephants, *Loxodonta africana*", *Animal Behaviour* Volume 74, Issue 2, August 2007, Pages 287-296.
- Ian H. Dinwoodie and Eric A. Vance, "Moment estimation in delay tomography with spatial dependence", *Performance Evaluation* Volume 64, Issues 7-8, August 2007, Pages 613-628.
- Eric Vance, David Banks, and Tamraparni Dasu, "Statistical Approaches to Mining Multivariate Data Streams." Paper presented at 2007 Joint Statistical Meetings.
- Eric Vance, "Social Networks within Calling Networks." Paper presented at 2006 Army Conference on Applied Statistics.
- Eric Vance and David Banks, "Agent-Based Methods for Dynamic Social Networks." Paper presented at 2006 Joint Statistical Meetings.

## Computer Skills

- R, Matlab, JMP-IN, and some experience with SAS

## Travel

- Backpacked around the United States and 65 countries during three major trips through Europe, South and SE Asia, and Australia-NZ (23 months); C. and S. America (8 months); and Africa (6 months) 1997-2002