Joseph A. Calandrino

EDUCATION:

2006-Present   **Princeton University, Princeton, NJ**
Enrolled in Computer Science Ph.D. program
Research Interests: Information security, information technology policy
Advisor: Edward W. Felten

2000-2006   **University of Virginia, Charlottesville, VA**
Master of Computer Science, 2005
Project Title: Private Resource Pairing
Advisor: Alfred C. Weaver

Bachelor of Science with Highest Distinction in Computer Science, Mathematics, 2004
Thesis Topic: Development and Limitations of a Context-Dependent Text-to-Speech System
Advisor: Paul F. Reynolds
Rodman Scholar (Honors Program)

RESEARCH EXPERIENCE:

2007-Present   **Research Assistant – Princeton University**
- Examine issues of private information leakage from publicly available data
- Conduct research into audit methods for voting systems

2005-2006   **Research Assistant – University of Virginia**
- Developed methods to balance information privacy and availability, including:
  - Cryptographic techniques matching entities not wishing to reveal resource requests with entities not wishing to reveal resource possession publicly
  - Proof that Boneh-Franklin encryption is anonymous across master keys
  - Data sanitization techniques that provably protect privacy while offering fine-grained utility guarantees for sanitized data

TEACHING EXPERIENCE:

2004-2005   **Teaching Assistant – CS 201: Software Development Methods, University of Virginia**
- Assisted for two semesters (Class sizes: 90 students, 240 students)
- Led laboratory sessions (~40 students/lab), held office hours, gave multiple guest lectures
- Prepared laboratory work and other assignments; assisted in grading
- Organized undergraduate teaching assistants

INDUSTRY EXPERIENCE:

Summer, 2006   **Intern – Oak Ridge National Laboratory, Oak Ridge, TN**
- Developed tools and methods to assist in detection of insider threats to information systems
- Applied machine learning techniques to detect anomalies in insider behavior

Summer, 2004   **Software Engineer Intern – Science Applications International Corp (SAIC), Chantilly, VA**
- Developed audit tools and object relational database tools in J2EE
- Used Struts, JMS, JSP's, servlets, Hibernate, Eclipse, WebSphere, MySQL

Summer, 2003   Junior Software Developer Intern – SAIC, Arlington, VA
- Assisted in development and optimization of facial recognition software

Summer, 2002   Geophysical Software Developer – SAIC, Arlington, VA
- Developed GUI-based tools to interact with Oracle database, manage analysis of seismic data

UNIVERSITY AND PROFESSIONAL SERVICE:
Organizer – Princeton Security Reading Group, 2006-Present
External Reviewer – International Conference on Knowledge Discovery and Data Mining, 2006
Web Master – Technical Committee on Computer Architecture, IEEE, 2001-2006
Member – University of Virginia Computer Science Web Team, 2001-2004
Member – University of Virginia Residence Staff, 2002-2004, 2005-2006
- Graduate Advisor, 2005-2006; Head Resident, 2003-2004, Resident Advisor, 2002-2003

HONORS: U.S. Department of Homeland Security Graduate Fellow, 2005-Present
Undergraduate Research and Design Symposium Finalist, 2004
Department of Computer Science Undergraduate Service Award Recipient, 2003
Pi Mu Epsilon Mathematics Honorary Society Member
Golden Key Honor Society Member
National Society of Collegiate Scholars Member
Dean's List, 2000-2004
A. Thomas Young Scholarship Recipient, 2002-2004
Class of 1986 Scholarship Recipient, 2001-2002
Westmoreland Davis Memorial Foundation Scholarship, 2000-2001
NCR Scholarship Recipient, 2000-2001
Gold Award Recipient, Humor Writing, Scholastic Art & Writing Awards 2000

REFERENCES: Available upon request