JOHN B. SLANKAS

EDUCATION

Doctor of Philosophy, Computer Science North Carolina State University Dissertation Title: *Access Control Policy Extraction from Natural Language* Advisor: Laurie Williams Spring 2014 (expected)

Master of Science, Computer Science 1993

University of Arizona

University of Notre Dame

Bachelor of Science, Mathematics 1992

PROFESSIONAL EXPERIENCE

Security Consultant (May 2013 to September 2013)

Developed software security program outline as part of a team for a multi-national manufacturing corporation. Created secure coding standards for C, Java, and .NET. Created static and dynamic analysis materials.

Development Team Leader (February 2012 to January 2013)

National Collaborative for Bio-Preparedness, Chapel Hill, NC Led a team of four professionals to develop an interactive web-based application using agile software methods for a bio-surveillance system. Provided technical guidance and project management expertise. Partnered with business partners to identify and prioritize requirements

Systems Analysis/Program Senior Manager (January 2006 to June 2009)

Wachovia Corporation, Charlotte, NC

Led team of seven professionals to design, develop, operate, and maintain custom identity management based applications to support Wachovia's Information Security Group. *Responsibilities:*

- Provide technical guidance, leadership, support and training for the development and maintenance of applications.
- Partner with peers in Wachovia's Information Security Group to identify and specify complex business requirements and processes. Lead team in the application design, testing and implementation of those requirements and processes.
- Coordinate application changes with the client area, development staff, operations, network, security and IT technical staff.
- Mentor employees.

Accomplishments:

- Ensured system access reviews of over 120,000 employees performed on a triannual basis, a critical activity to meet compliance and regulatory standards.
- Oversaw development and operational support of a system to request, approve, and provision access requests. System performed over 20,000 requests per month with most of the provision requests automatically completed.

- Developed and supported system to track critical HR transactions related to identity management needs, which enabled us to send appropriate transfers and terminations notices.
- Designed and oversaw development of a system to track IT developer's access and ensure appropriate privileges were granted and monitored in production environments.

Web Group Leader (September 1999 to December 2005):

Wachovia Corporation, Charlotte, NC

Led team of six professionals responsible for developing and maintaining customized web applications for Wachovia's Human Resources Division.

Accomplishments:

- Led team to develop, deploy and maintain HR Online. This internally built application provides employee self-service transactions, manager self-service transactions, job postings, HR Handbook, and corporate directory. Over 99% of the active employee population accessed the application. Over 25,000 users access the application on a daily basis. HR Online provides tremendous cost savings to the corporation by automatically processing transactions into the payroll system. System processes over 50,000 transactions and 8,500 job applications monthly. Application is available through Wachovia's intranet as well as the Internet.
- Developed application to send out targeted email to various population groups.
- Developed real-time interface to synchronize corporate LDAP servers with HR data
- Original member from Shared Services on Wachovia's Architecture Standards board.
- Developed and maintain disaster recovery architecture and processes for applications.

Senior Consultant (June 1998 to August 1999):

Sybase, Inc., Atlanta, GA

Designed and developed Java solutions for a large national bank. These solutions enabled the bank to effectively manage employees and the company's organizational structure. Other developed solutions supported the company's intranet environment. These solutions involved design, development, and testing of Java applets and applications as well as database work with data modeling and performance & tuning. Teamed and mentored with bank employees to complete these projects. Team leader of three consultants – responsible for their development and reviews.

Software Engineer / Captain (June 1996 to June 1998):

USAF - National Security Agency, Ft. Meade, MD

Led a seven-person database team. Designed, developed, and maintained a wide variety of database applications and automatic processing software using object-oriented and structured design methods. Applications and databases enabled the division to process mission critical data in a timely manner. Met regularly with customers to discuss requirements receive feedback on existing and developing systems. Organized and taught weekly sessions in such areas as HTML, CGI, Java, optimization, and usability to improve the knowledge of division personnel.

Software Process Engineer / First Lieutenant (May 1994 to May 1996):

USAF - Space and Warning Systems Center, Peterson AFB, CO

Designed, developed, and maintained a database workflow application to track software changes, problems, and requests for large-scale military systems at NORAD. Insured the application helped the organization perform various key process areas of the SEI's Capability Maturity Model. The application reduced maintenance costs through such items as automated configuration control,

reducing time to staff and analyze problems reports, milestone tracking, and eliminating change traceability problems.

TEACHING EXPERIENCE Instructor North Carolina State University Introduction to Java	Spring 2011
Instructor <i>University of Arizona</i> Software Engineering	Summer 1993
Teaching Assistant <i>North Carolina State University</i> Software Security Compilers Object-Oriented Languages and Systems	Fall 2010 Spring 2010 Fall 2009
Teaching Assistant <i>University of Arizona</i> Software Engineering	Fall 1993
Instructor <i>Sybase, Inc.</i> Fast Track to Java, Rapid Application Development with PowerJ	1998-1999
Contributing Editor OpenSeminar course materials project	2010-2013
Guest Lecturer <i>North Carolina State University</i> Software Security – Data Security (2010, 2011, 2012, 2013) Software Security – Privacy (2013)	
RESEARCH EXPERIENCE Research Assistant	Summer 2010 – Spring 2014

Research Assistant North Carolina State University

PUBLICATIONS

Referred Journals

J. Slankas and L. Williams, 2013. Access Control Policy Identification and Extraction from Project Documentation, *Academy of Science and Engineering Science Journal* Volume 2, Issue 3.

Referred Conferences, Symposiums, and Workshshops

J. Slankas and L. Williams, "Access Control Policy Extraction from Unconstrained Natural Language Text", *2013 ASE/IEEE International Conference on Privacy, Security, Risk, and Trust (PASSAT 2013)*, Washington D.C., USA, September 8-14, 2013. (Acceptance Rate: 9.6%)

J. Slankas and L. Williams, "Automated Extraction of Non-functional Requirements in Available Documentation", *1st International Workshop on Natural Language Analysis in Software Engineering (NaturaLiSE 2013)*, San Francisco, CA.

J. Slankas, "Implementing Database Access Control Policy from Unconstrained Natural Language Text", *35th International Conference on Software Engineering - Doctoral Symposium (ICSE DS 2013)*, San Francisco, CA.

J. Slankas and L. Williams, "Classifying Natural Language Sentences for Policy", *IEEE International Symposium on Policies for Distributed Systems and Networks (POLICY 2012)*, Chapel Hill, NC.

D. Binkley, D. Lawrie, E. Hill, J. Burge, I. Harris, R. Hebig, O. Keszöcze, K. Reed and J. Slankas, "Task Driven Software Summarization", 29th IEEE International Conference on Software Maintenance (ICSM 2013), Eindhoven, The Netherlands.

Research Posters

Access Control Policy Extraction from Natural Language Text, *Safety, Security, Privacy, and* Interoperability of Health Information Technnologies (HealthTec 2013), Washington D.C., Aug 12, 2013

PRESENTATIONS

NoSQL: Security Objectives and Principles, NCSU Health IT Forum, November, 2013 Introduction to Java, Sybase TechWave Conference, Orlando, Florida, August 1999 Intranet Web Experiences, Internal Workshop, National Security Agency, 1998

SERVICE

Journal Reviewer

Computer - Special Issue on Software Testing 2013

Conference Co-Reviewer

AGILE: 2013

IEEE/ACM International Conference on Automated Software Engineering (ASE): 2013 Intl. Symposium on Empirical Software Engineering and Measurement (ESEM): 2011, 2012, 2013 International Symposium on Engineering Secure Software and Systems (ESSOS): 2012 International Conference on Software Engineering (ICSE): 2011, 2012, 2013 International Conference on Software Testing, Verification and Validation (ICST): 2012, 2013 International Symposium on Software Reliability Engineering (ISSRE): 2011, 2012, 2013 Working Conference on Mining Software Repositories (MSR): 2013 International Conference on Software Security and Reliability (SERE): 2012

Workshop Recorder

Computational Cybersecurity in Compromised Environments (C3E) Workshop, January 2014

Conference Volunteer

NSF Aspiring PI Workshop, October 2012 19th ACM Conference on Computer and Communications Security, October 2012

OTHER EDUCTION

Basic Communications Officer Training, Keesler AFB, MS

PROFESSIONAL MEMBERSHIPS

Association for Computing Machinery IEEE Computer Society

HONOR AND AWARDS

Outstanding Graduate Teaching Assistant, North Carolina State University, 2011 Outstanding Teaching Assistant, Department of Computer Science, 2010 and 2011 Mentored Teaching Assistant, Spring 2011

Technical Skills

Databases:	Oracle, Microsoft SQL Server, MySQL, PostgreSQL, PostGIS, Sybase, LDAP
Languages:	ASP, C, CSS, HTML, Java, JavaScript, Perl, R, Ruby, SQL, Transact-SQL
APIs:	JDBC, jQuery, REST, RMI, Servlets
Platforms:	Microsoft Windows, Unix and Linux variants
Web Servers:	Apache, IIS, SunOne/iPlanet
Application	jBoss, Tomcat, WebSphere
Servers:	
Tools:	Eclipse, Fortify, Microsoft Office, Microsoft Project, RStudio, Weka, Visio
Other.	Agile development, data analysis, data visualization, machine learning, natural language processing, project management, service-oriented architecture, software security, virtualization, usability

Updated: September, 16, 2013