

NWOKEDI C. IDIKA

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EDUCATION:

Ph.D. Computer Science (Security) August 2010
Purdue University, West Lafayette, IN
Department of Homeland Security S.T.E.M. Scholar

M.S. Computer Science December 2007
Purdue University, West Lafayette, IN

B.S. Computer Science May 2005
University of Maryland Baltimore County, Catonsville, MD

PUBLICATIONS:

- **Idika, N.** and Marshall, B. and Bhargava, B. “Maximizing Network Security Given a Limited Budget,” Tapia '09, April 2009.
- **Idika, N.** and Mathur, A. “Survey of Malware Detection Techniques,” Software Engineering Research Center (SERC), March 2007.
- Oliveira, R. and Bhargava, B. Zhang, Y. and **Idika, N.** “Collaborative Attacks and Defense in Wireless Networks,” International Conference on Distributed Computing Systems Workshop SAHN, May 2009.
- Bhargava, B. and Zhang, Y. and **Idika, N.** and Lilien, L. and Azarmi, M. “Collaborative Attacks in WiMAX Networks,” Wiley’s Security and Communication Networks Journal Special Issue on: WiMAX Security and Applications, August 2009.

PROFESSIONAL/RESEARCH EXPERIENCE:

Software Theoretic, Corporation, Ashburn, VA (2009 – Present)
Director of Applied Research & Development

“Leveraging mobile platforms and enterprise information systems to assist our nation's senior citizens live more independent lives.”

- Designing and developing medication and diet management applications in Objective C for the Apple iPhone and Google Android mobile platform.
- Developing Geographical Information System (Java, JEE, Grails, Spring, Hibernate) back-end to track the location of disoriented users.
- Writing research grants to fund future mid-term research and product development.

- Working closely with research scientists at the National Institutes of Health to formulate and refine future research efforts.
- Working with our Technical Services team to build a reusable, iPhone based Content Management System that will allow our customers to quickly build enterprise level applications targeted at the Apple iPhone mobile platform.

eSposure, West Lafayette, IN

(2007 - Present)

CEO/Founder

“The premiere online destination for new product demonstration videos”

- Lead technical contractors from concept through the launch of eSposure.com in 4 months
- Raised angel investment to assist in the launch of esposure.com
- Developed requirements and specifications for the development of esposure.com
- Performed acceptance/beta/launch testing on esposure.com
- Extended esposure.com in PHP on a Linux platform to include enhanced forms and advanced multimedia features
- Developed and implemented a marketing strategy focused on bringing businesses to esposure.com to pitch their value proposition
- Produced an authentication based web service Address Book in Ruby on Rails

Purdue University, West Lafayette, IN

(2005 – 2009)

Research Fellow

- Produced Java extensions for an attack graph generator, MulVal, that is written in C++ and Perl.
- Implemented process scheduling algorithms, a virtual file system, and on-demand paging in a custom unix-like operating system called Xinu
- Produced a survey of Security Metrics for Information Systems and have implemented security metric analyses over attack graphs in Java
- Produced a survey of Malware Detection Techniques that is published at the Software Engineering Research Conference (SERC) and performed formal testing techniques on C programs to detect vulnerabilities
- Developed an iPhone App (Objective C) which draws shapes based on user specification
- Launched African-American Ph.D.s in Computer Science (aaphdcs.org) social network

MITRE, Corporation, McLean, VA

(2004 – 2006)

Software Engineer

- Installed, configured, and implemented software in C/C++ & Java to support Extending Tactical Services to the Tactical Edge (EES2TE)

- Used Java and a proprietary MITRE simulation package to model flight travel to help understand the difficulty of an air traffic controller's job
- Performed Cisco router configuration and wireless configuration research to support classified work
- Implemented customized performance metrics loader in Java & conducted a survey of 20+ software tools to support recommendations made to the FAA

Yale University, New Haven, CT

(2003)

Research Fellow

- Implemented a novel plane-fitting/point-projection algorithm in MATLAB to determine the connectivity of 3D points to aid colorectal cancer research