# Sarah Elder

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# **Education**

North Carolina State University, Raleigh, NC

MS, PhD Computer Science

Provost Fellowship Recipient (2015-2016), Graduate Research Assistant (2016-2017)

University of Virginia, Charlottesville, VA

BA Computer Science, BA History

GPA: 3.6

Anticipated PhD: 2019

Graduation Date: May 2012

# **Experience**

IBM, I/T Specialist, DC Metropolitan Area

2012-2015

GPA: 3.7

- Prepared test plans and test data, and analyzed defects found in a claims management system
- Provided guidance and training to new members of the test team
- Performed requirements analysis and researched interoperability standards for use in an online educational assessment system
- Assisted in multiple proposal efforts

Corporation for National Research Initiatives, Intern, Charlottesville, VA

2012

NASA Langley Research Center, DEVELOP/LARSS Summer Intern, Hampton, VA

2011

# **Current Research Activity**

**Dissertation Topic:** *Identifying and Consolidating Security Requirements in Regulatory Documents* 

### **Related Activities:**

- Student volunteer at the 24<sup>th</sup> International Requirements Engineering Conference (RE '16)
- Student participant in the Science of Security lablet at NCSU (2016-2017)
- Selected to participate in the 2017 CRA-W Grad Cohort Workshop and poster session

#### Service

# NC State STARS, Raleigh, NC

Assisted in Saturday sessions that teach programming skills to students from underserved populations

### IBM Public Sector Women's Networking Group (PSWNG), DC Metropolitan Area

- Participated in the IBM's Public Sector Women's Networking Group (PSWNG) mentoring program
- Volunteered with the PSWNG teaching Saturday classes at a charter school in Washington D.C.

## Selected Graduate Coursework

- Human Computer Interaction
- Software Engineering as a Human Activity
- Software Security
- Software Engineering
- Networks

- Computational Applied Logic
- Experimental Statistics
- Operating System Security

### **Technical Skills**

Proficient In: Java, MySQL, Selenium (Webdriver)

Familiar With: Python, R, C++, HTML, Javascript, MS Office, Linux, Windows, WEKA

### **Peer-Reviewed Publications**

Riaz, M., Elder, S., Williams, L, "Systematically Developing Prevention, Detection, and Response Patterns for Security Requirements", 3rd International Workshop on Evolving Security and Privacy Requirements Engineering (ESPRE), Beijing, China, September 2016

Johnson, B., Pandita, R., Smith, J., Ford, D., **Elder, S.**, Murphy-Hill, E., Heckman, S., Sadowski, C., "A Cross-Tool Communication Study on Program Analysis Tool Notifications," Proceedings of the 2016 24th ACM SIGSOFT International Symposium on Foundations of Software Engineering, Seattle, WA, October 2016, pp. 73-84