

## Christopher Theisen

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### Work Experience

#### **Microsoft Research Cambridge UK**

*Research Intern • May 2014 – August 2014, May 2015 – August 2015*

- Innovated and developed a data-driven approach to attack surface estimation (C#, MSSQL, Python).
- Supported optimization efforts in software engineering management for internal Microsoft teams.

#### **Self Employed**

*Freelance Work • August 2012 – Present*

- Supported startups in the Cincinnati and Columbus areas in various capacities; entry into tech incubators, course correction on flagging projects, et cetera.
- Technical assistant to computational chemistry lab at the University of Cincinnati (development in C/Python, code reviews, troubleshooting, bug fixes).
- Acted as expert witness for a Raleigh-based company, helping to settle multi-million dollar lawsuit.

#### **Northrop Grumman – Xetron**

*Software Engineer • June 2010 – August 2012*

- Individual classified tasking in network security and software engineering (C, C++, ASM, MIPS, PPC).
- Responsible for multiple investigations into new reverse engineering targets (IDA Pro).
- Drove customer satisfaction from Satisfactory to Outstanding while in a customer-facing position.
- Provided on-site and remote technical assistance to customers in technical and non-technical roles.

*Software Engineer (Co-op) • March 2009 – September 2009*

- Led a team in developing a custom automated testing framework (TCL).

#### **Siemens PLM Software**

*Software Engineer (Co-op) • March 2007 – September 2007, March 2008 – September 2008*

- Acted as go-between for software developers and customers; use cases, simple bug fixes, etc.
- Developed scalability tests for servers to estimate server usage for CAD software (NX, SolidEdge).

### Education

**North Carolina State University** • PhD in Computer Science: August 2013 – Present • GPA: 3.87

*Research Assistant • Spring 2014 – Present*

- Dissertation Title: *Risk Based Attack Surface Approximation (RASA): Feasibility and Applicability*
- Designed course material for an online course on software security featuring over 1,000 students.
- Published eight conference and journal papers, including award-winning submissions.
- Mentored two undergraduate students during their first research experience in academia
- Invited to give presentations at conferences and meetings: Carnegie Mellon, ISSRE, among others.

*Teaching Assistant • Software Security – Fall 2013, Fall 2014, Fall 2016*

- Designed penetration testing and secure design assignments for the class.
- Lectured on multiple occasions on software security topics to classes of 100+ students.

**North Carolina State University** • Master of Science in Computer Science: May 2016 • GPA: 3.87

- Received Master's degree en route during PhD studies.

**University of Cincinnati** • Bachelor of Science in Computer Science: Graduated June 2010 • GPA: 3.7

- Senior design project; a ranking, sorting, and categorization system for Twitter.

### Skills/Achievements

- Languages: C, C#, Python, batch/bash scripting, some Ruby/Rails, some Java, some Javascript.
- Data Technologies: SciPy, NumPy, Scikit Learn, D3.js, MSSQL, some R, some SAS products.
- 1<sup>st</sup> Place Graduate Students – Student Research Competition (SRC) at FSE/ESEC 2015.
- 3<sup>rd</sup> Place Graduate Students – SRC Grand Finals (included all winners of SRC's at all ACM conferences).
- Most Outstanding Co-op – Computer Science Class of 2010.
- U.S. Marine Corps Leadership Award for leadership in the classroom – May 2008.