Joel Atkins

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EDUCATION

M.S. Computer Sciences, December 2018
University of Wisconsin - Madison
GPA 3.82/4.0
Coursework
Research - Differential Privacy & Robust Statistics, Applied Cryptography, Secure Programming, Computer Security, Advanced Algorithms, Computational Complexity, Optimization, Operating Systems, Number Theory, Combinatorics

B.S. Political Science; Certificate, Computer Sciences, May 2017
University of Wisconsin - Madison
Selected Coursework
Cryptography, Algorithms, Software Engineering, Data Structures, Machine Organization & Programming, Programming Languages & Compilers

PUBLICATIONS

J.A. Kupsch, B.P. Miller, E. Heyman, E. César, and **J. Atkins**, 2018, "First Principles Vulnerability Assessment 2.0" (In progress)
J. Atkins, S. Teja-Chavali, and S. Jha, 2018, "Making Robust Statistical Estimators Differentially Private" (In progress)

CS SKILLS

Programming Languages:(Proficient) C, C++, Java (Familiar) Python, x86 Assembly
Tools & Frameworks: Bash, Git, LaTeX, Sage

PRIOR WORK EXPERIENCE

Research Assistant   January 2018 - Present
UW-Madison Middleware Security and Testing Lab   Madison, WI

- Developed systematic techniques for software vulnerability assessments.
- Performed manual code analysis in order to identify vulnerabilities in multiple large scale grid platforms.
- Developed code to exploit identified vulnerabilities.
- Worked with development teams in order to mitigate identified vulnerabilities.

High-Threat Protection Specialist   August 2005 - March 2015
US Department of State   Kirkuk & Baghdad, Iraq / Kabul, Afghanistan

- Managed 300 person Embassy Protective Detail for US Embassy, Kabul.
- Oversaw operations, training, administration and logistics in high threat environment.
- Led small teams in carrying out high-priority objectives with minimal room for failure in high pressure situations.
- Assisted US government leadership in creation of Standard Operating Procedures for tactical reaction forces.
- Worked closely with government and civilian personnel from dozens of countries.

Non-Commissioned Officer   1997 - 2005
United States Army   Various Locations Worldwide

- Served as small-unit leader on deployments to Iraq, Bosnia/Croatia/Hungary, Nicaragua and Dominican Republic.
- Conducted operations in Iraq as part of Operation Iraqi Freedom I.
- Responsible for training Small-Unit Tactics, Law & Order Operations and Firearms to over 100 members of fledgling Iraqi Police force.
- Conducted operations in the Balkans and Central America in conjunction with local forces.