joe.loughry@netoir.com Joe Loughry (270) 277-7800

Research Director netoir.com 2017–present

Cross domain solutions with inherent immunity to malware infection, Spectre and Meltdown attack. FPGA or VLSI implementation from a security-approval–forward basis. Software development, hardware prototyping, and systems engineering for early-stage company.

Research Assistant Professor University of Denver 2016–2017

Taught computer security, beginning C programming, and ethical hacking at undergraduate and graduate levels. Daily lecture and laboratory demonstrations of cyberweapons, counterintelligence, and TEMPEST countermeasures. Lectured on sociopolitical issues arising from new cyberweapons, government spying, and privacy.

Consultant C&A Docs, Inc. 2015–2016

Secret-and-Below (SABI) certification of two new cross domain solutions (CDS) for a developer in the Washington, DC area. Advising on likely certifier directions and anticipating certifier moves. Vulnerability analysis. Arguing NIST 800-53 security controls with certifier.

Postgraduate Researcher University of Oxford 2007–2015

Discovered methods to control the schedule and predict the outcome of security Certification and Accreditation (C&A) testing of cross domain solutions (CDS) for intelligence community (IC), collateral, and international.

Information Assurance Engineer Lockheed Martin 2006–2012

Lead for $968,000 US Air Force project for probabilistic redaction system. Wrote the Security Target (ST) for the Common Criteria (CC) evaluation of Radiant Mercury. Primary interface with NSA, DISA, and GCHQ in the UK.

Senior Software Engineer Lockheed Martin 1998–2006

Invented nested digital signatures for satellite imagery files—U.S. patent number 8,793,509. Discovered the optical TEMPEST effect and its countermeasures—U.S. patent number 6,987,461. Software developer and security engineer for RADIANT MERCURY.

Discoverer of numerous cybersecurity vulnerabilities; internationally known researcher, conference speaker, consultant, and open source software contributor with degrees in CS, math, and software engineering.

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