Thomas Benjamin

Thomas Scott Benjamin
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https://cryptocracy.net

Skills

- Security & Cryptography
- Research & Development
- Technologies: Linux, C, C++, Java, Python, PHP, Full Stack LAMP / LEMP

Experience

Applied Communication Sciences / Senior Research Scientist
April 2017 - Present,   Basking Ridge, NJ

Cybersecurity research

Cryptocracy LLC / Member
August 2016 -April 2017,   Home Office in Cold Spring, NY

Information security consulting including Fortune 500 clients

TPiPR / CTO
March 2013 - August 2016,   San Juan, PR - (Work performed remotely 80% of the time)

Responsible for research and development. Oversaw growth from 2 developers to 27. Managed 4 teams working with multiple programming languages on multiple platforms. Led research on voice biometry.

Aquavit Pharmaceuticals / VP Technology
March 2012 - March 2013,   NYC, NY - Seoul, South Korea - (50% remote)

Managed development process of multiple products including healthcare software and medical devices with engineering teams in the US and South Korea

Cryptocracy LLC / Member
January 2011 - March 2012,   Home Office in Cold Spring, NY

Information security research and consulting

The Tor Project / Research Scientist
March 2010 -March 2011,   Home Office in Cold Spring, NY

Research into censorship circumvention and free speech technology

ETH Zürich / Research Assistant
January 2008 - March 2010,   Zürich, Switzerland

Doctoral research on security and privacy of implantable medical devices and RFID leading to 3 publications in venues such as ACM CCS and Usenix Security

IBM Research Zürich / Researcher

July 2007 - December 2009,   Rüschlikon, Switzerland

Research on security and privacy technology such as anonymous credentials leading to 3 peer reviewed publications and 2 patents

University of Massachusetts Amherst / Research Assistant

August 2004 - July 2007,   Amherst, MA

Research on security and privacy leading to 5 peer reviewed publications, including 2 ethical disclosures reported through the New York Times

Riverdale Country School / Teacher, Administrative staff member

September 2000 - August 2004, Bronx, NY

Education

ETH Zürich / Doctoral Research (ABD)

2008 - 2010, Zürich, Switzerland

Thesis topic: Security and Privacy of Embedded Devices

University of Massachusetts Amherst / M. S. in Computer Science

2004 - 2007, Amherst, MA

Thesis topic: Cloning Resistant Anonymous Credentials

Yale University / B.S. in Computer Science

1996 - 2000, New Haven, CT

Awards and Patents

IEEE Security and Privacy Best Paper Award
"Pacemakers and Implantable Cardiac Defibrillators: Software Radio Attacks and Zero-Power Defenses" *Security and Privacy, 2008. SP 2008. IEEE Symposium on*

Cryptographic proofs in data processing systems
US Patent No.: US8527777B2

Cryptographic Encoding and Decoding of Secret Data
US Patent No.: US8744077B2

Selected Media Coverage

"A Heart Device Is Found Vulnerable to Hacker Attacks"
The New York Times, March 12 2008

"Heart-Device Hacking Risks Seen"
The Wall Street Journal, March 12 2008

"Researchers See Privacy Pitfalls in No-Swipe Credit Cards"
The New York Times, October 23, 2006

Memberships

Mensa, ACM, IEEE