

Ben Weintraub

CONTACT INFORMATION Email: benweintraub34@gmail.com Boston, MA
 GitHub: github.com/iowaguy Cell: (847) 903-3555
 Website: ben-weintraub.com

RESEARCH INTERESTS Distributed ledgers, payment channel networks, byzantine fault-tolerant systems, secure routing protocols, peer-to-peer networks, software-defined networks, network protocols

EDUCATION **Northeastern University**, Boston, MA **September 2018 – present**
 PhD in Computer Science

- GPA: 4.0/4.0
- Expected Graduation: June 2023
- Advisor: Dr. Cristina Nita-Rotaru

University of Iowa, Iowa City, IA **September 2008 – June 2013**
 BS in Electrical Engineering

PROFESSIONAL EXPERIENCE **Northeastern University**, Boston, MA **May 2019 – present**
 Research Assistant, Networks and Distributed Systems Security Lab

- *Security of Payment Channel Networks*: Developing denial of service attacks against routing algorithms in payment channel networks.
- *Moving Target Defense using Software-defined Networks*: Investigating the use of path-hopping algorithms in software-defined networks for guaranteeing information-theoretic security under the MTD attacker model.
- *State-machine Extraction Using Natural Language Processing*: Understanding how state-machines are represented in protocol RFCs.

BlueTalon, Sunnyvale, CA **March 2015 – July 2018**
 Software Engineer

- *Access Control*: Worked on policy enforcement proxies for Postgres, Impala, Hive, and HDFS. Built infrastructure for deployment of distributed software.

IBM, Kansas City, MO **June 2013 – March 2015**
 Software Engineer

- *Distributed Databases*: Developed fault tolerance features for the Netezza Data Warehouse, and hardened code to pass government security standards.

University of Iowa, Iowa City, IA **December 2011 – June 2013**
 Research Assistant

- *Digital Circuit Board Modeling*: Optimized 3D rendering algorithm for integrated circuit component thermal analysis.

Syncbak, Inc., Marion, IA **June 2011 – August 2011**
 Software Engineering Intern

- *Broadcast Reliability*: Developed code for testing reliability of experimental methods for digital television signal transmission.

PATENTS **Weintraub, Benjamin L.**, and Pratik Verma. "Policy management, enforcement, and audit for data security." U.S. Patent Application No. 15/061,991.

Weintraub, B., BlueTalon Inc. Consensus-based Policy Management. 2018. *Pending*.

Weintraub, B., Verma, P., Mujumdar, P., BlueTalon Inc. Policy Enforcement for Search Engines. 2018. *Pending*.

PUBLICATIONS	<p>Weintraub, B., Nita-Rotaru, C., Roos, S. Exploiting Centrality: Attacks in Payment Channel Networks with Local Routing. <i>In Review.</i></p> <p>Pacheco, M. L., Weintraub, B., von Hippel, M., Goldwasser, D., Nita-Rotaru, C. Attacking State-Machines from Unstructured Text. <i>Under Preparation.</i></p> <p>Goerdt, B., Ozbolat, I., Dababneh, A., Weintraub, B., et al. (2013, 15-21 November). Integration of a Reliability Model Within a Virtual Analysis System For Printed Circuit Boards. Paper presented at the ASME International Mechanical Engineering Congress and Exposition, San Diego, California USA</p>
RELEVANT COURSES	Distributed Systems, Networking, Operating Systems, Network Security, Algorithms, Programming Languages, Data Structures
OPEN SOURCE CONTRIBUTIONS	Hyperledger Hardened identity certificate verification and contributed test scenarios
AWARDS AND LEADERSHIP	<p>Best Project in Distributed Systems class as voted on by peers (2018)</p> <p>VP of Membership, Toastmasters – Stanford University chapter (2015-2016)</p> <p>Recipient, University of Iowa National Scholars Award (2008-2012)</p> <p>Recipient, Engineering Excellence Award (2009)</p> <p>Captain, Iowa Men’s Ultimate Frisbee Team (2012-2013)</p>
PROFESSIONAL MEMBERSHIP	<p>Member, Association for Computing Machinery (ACM), July 2016-Present</p> <p>Member, Institute of Electrical and Electronics Engineers (IEEE), July 2016-Present</p>