

Ben Weintraub

CONTACT INFORMATION	Email: benweintraub34@gmail.com GitHub: github.com/iowaguy Website: ben-weintraub.com	Boston, MA Cell: (847) 903-3555
RESEARCH INTERESTS	Payment channel networks, blockchains, distributed ledgers, byzantine fault-tolerant systems, secure routing protocols, peer-to-peer networks, software-defined networks, network protocols	
EDUCATION	Northeastern University , Boston, MA <i>PhD in Computer Science</i> September 2018 – present <ul style="list-style-type: none">• GPA: 4.0/4.0• Expected Graduation: June 2023• Advisor: Dr. Cristina Nita-Rotaru University of Iowa , Iowa City, IA <i>BS in Electrical Engineering</i> September 2008 – June 2013	
PROFESSIONAL EXPERIENCE	Northeastern University , Boston, MA May 2019 – present Research Assistant, Networks and Distributed Systems Security Lab <ul style="list-style-type: none">• <i>Security of Payment Channel Networks</i>: Developing denial of service attacks against routing algorithms in payment channel networks.• <i>Moving Target Defense in Software-defined Networks</i>: Investigating using a path-hopping algorithm in software-defined networks to guarantee information-theoretic security under the MTD attacker model.• <i>State-machine Extraction Using Natural Language Processing</i>: Understanding how state-machines are represented in protocol RFCs. BlueTalon , Sunnyvale, CA March 2015 – July 2018 Software Engineer <ul style="list-style-type: none">• <i>Access Control</i>: 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 <ul style="list-style-type: none">• <i>Distributed Databases</i>: 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 <ul style="list-style-type: none">• <i>Digital Circuit Board Modeling</i>: Optimized 3D rendering algorithm for integrated circuit component thermal analysis. Syncbak, Inc. , Marion, IA June 2011 – August 2011 Software Engineering Intern <ul style="list-style-type: none">• <i>Broadcast Reliability</i>: 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. <i>Pending</i> . Weintraub, B. , Verma, P., Mujumdar, P., BlueTalon Inc. Policy Enforcement for Search Engines. 2018. <i>Pending</i> .	

PUBLICATIONS	<p>Weintraub, B., Nita-Rotaru, C. Network Models and Griefing Attacks of Payment Channel Networks. <i>In progress</i>.</p> <p>Goerdts, 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 Fixed edge cases in verifying identity certificates; project supported by The Linux Foundation
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>