

# Ben Weintraub

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CONTACT INFORMATION	Email: benweintraub34@gmail.com GitHub: <a href="https://github.com/iowaguy">github.com/iowaguy</a> Website: <a href="http://ben-weintraub.com">ben-weintraub.com</a>	Boston, MA Cell: (847) 903-3555
RESEARCH INTERESTS	Distributed ledgers, payment channel networks, byzantine fault-tolerant systems, secure routing protocols, peer-to-peer networks, software-defined networks, network protocols	
EDUCATION	<b>Northeastern University</b> , Boston, MA <i>PhD in Computer Science</i> <ul style="list-style-type: none"><li>• GPA: 4.0/4.0</li><li>• Expected Graduation: June 2023</li><li>• Advisor: Dr. Cristina Nita-Rotaru</li></ul>	<b>September 2018 – present</b>
	<b>University of Iowa</b> , Iowa City, IA <i>BS in Electrical Engineering</i>	<b>September 2008 – June 2013</b>
PROFESSIONAL EXPERIENCE	<b>Northeastern University</b> , Boston, MA <b>Research Assistant, Networks and Distributed Systems Security Lab</b> <ul style="list-style-type: none"><li>• <i>Security of Payment Channel Networks</i>: Developing denial of service attacks against routing algorithms in payment channel networks.</li><li>• <i>Moving Target Defense using Software-defined Networks</i>: Investigating the use of path-hopping algorithms in software-defined networks for guaranteeing information-theoretic security under the MTD attacker model.</li><li>• <i>State-machine Extraction Using Natural Language Processing</i>: Understanding how state-machines are represented in protocol RFCs.</li></ul>	<b>May 2019 – present</b>
	<b>BlueTalon</b> , Sunnyvale, CA <b>Software Engineer</b> <ul style="list-style-type: none"><li>• <i>Access Control</i>: Worked on policy enforcement proxies for Postgres, Impala, Hive, and HDFS. Built infrastructure for deployment of distributed software.</li></ul>	<b>March 2015 – July 2018</b>
	<b>IBM</b> , Kansas City, MO <b>Software Engineer</b> <ul style="list-style-type: none"><li>• <i>Distributed Databases</i>: Developed fault tolerance features for the Netezza Data Warehouse, and hardened code to pass government security standards.</li></ul>	<b>June 2013 – March 2015</b>
	<b>University of Iowa</b> , Iowa City, IA <b>Research Assistant</b> <ul style="list-style-type: none"><li>• <i>Digital Circuit Board Modeling</i>: Optimized 3D rendering algorithm for integrated circuit component thermal analysis.</li></ul>	<b>December 2011 – June 2013</b>
	<b>Syncbak, Inc.</b> , Marion, IA <b>Software Engineering Intern</b> <ul style="list-style-type: none"><li>• <i>Broadcast Reliability</i>: Developed code for testing reliability of experimental methods for digital television signal transmission.</li></ul>	<b>June 2011 – August 2011</b>
PATENTS	<b>Weintraub, Benjamin L.</b> , and Pratik Verma. "Policy management, enforcement, and audit for data security." U.S. Patent Application No. 15/061,991.	
	<b>Weintraub, B.</b> , BlueTalon Inc. Consensus-based Policy Management. 2018. <i>Pending</i> .	
	<b>Weintraub, B.</b> , Verma, P., Mujumdar, P., BlueTalon Inc. Policy Enforcement for Search Engines. 2018. <i>Pending</i> .	

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