Sam DeLaughter

Education

Massachusetts Institute of Technology – Cambrige, MA
Ph.D., Electrical Engineering and Computer Science *Expected May 2022*
S.M., Electrical Engineering and Computer Science *February 2019*

University of Massachusetts – Amherst, MA
Non-Degree Graduate Student, Computer Science and Mathematics *January 2014 – May 2016*

Hampshire College – Amherst, MA
B.A., Interdisciplinary Studies *May 2012*

Research, Teaching, and Industry Experience

Massachusetts Institute of Technology – Cambridge, MA
Research Assistant to Dr. Karen Sollins, CSAIL *September 2016 – Present*
+ Measuring and mitigating Denial of Service attacks, primarily at the network and transport layers

Recitation Instructor, 6.033: Computer Systems Engineering *Spring 2021*
Teaching Assistant, 6.UAR: Preparation for Undergraduate Research *Fall 2019, Spring 2020*
Teaching Assistant, 6.033: Computer Systems Engineering *Spring 2019*

Aarno Labs – Cambridge, MA
Research Intern *June 2019 – Present*
+ R&D for a NAT-traversing overlay network used by a distributed botnet detection and neutralization system

NASA Goddard Space Flight Center – Greenbelt, MD
Summer Intern, Space Communications and Navigation (SCaN) *Summer 2019*
+ Automated monitoring of NIST security controls for Space Network Ground Segment Sustainment (SGSS)
+ Developed network monitoring data visualizations for Delay/Disruption Tolerant Networking (DTN)

Akamai Technologies – Cambridge, MA
Co-op Software Engineer, Akamai Labs *Summer & Fall 2018*
+ R&D of a novel consensus protocol for a high-throughput low-latency blockchain payment network

Technical University of Berlin – Berlin, Germany
Visiting Research Scientist, Internet Network Architectures Group *Summer 2017*
+ Analyzed public and private traceroute databases to identify hidden Internet peering infrastructure

University of Massachusetts Amherst – Amherst, MA
Volunteer Research Assistant to Drs. Jim Kurose and Arun Venkataramani *May 2015 – August 2016*
+ Evaluated GigaPaxos, a scalable consensus algorithm developed to support global DNS in MobilityFirst

Systems Administrator *November 2012– August 2016*
+ Co-managed a four-building wired and wireless network, a multi-department LDAP server, a multi-OS scientific computing lab, and a hardware/software helpdesk for 1000+ faculty, staff, and students

Publications & Patents

Inventor, “High Performance Distributed System of Record with Confidence-Based Consensus” *Patent Pending*

Programming Languages: Python, Bash, Go, C++, C, HTML/CSS/JS, Java, LaTeX, MaxMSP, Processing
Systems / Utilities: UNIX, TCP/IP, OpenStack, AWS, Azure, LDAP, SQL Server, Git, Wireshark, perf, eBPF