

Samuel DeLaughter

Network Security | Performance Measurement | Protocol Design

Education

S.M. / Ph.D. Student, Electrical Engineering and Computer Science
Massachusetts Institute of Technology | *Cambridge, MA*

September 2016 – Present
S.M. Granted February 2019

Non-Degree Graduate Student, Computer Science and Mathematics
University of Massachusetts Amherst | *Amherst, MA*

January 2014 – May 2016

B.A., Interdisciplinary Studies
Hampshire College | *Amherst, MA*

September 2008 – May 2012

Research and Teaching Experience

Research Assistant to Dr. Karen Sollins

September 2016 – Present

CSAIL | Massachusetts Institute of Technology | *Cambridge, Massachusetts*

- + Developing methods for evaluating and comparing proposed Future Internet Architectures.
- + Identifying DoS vulnerabilities and measuring their impact on server resource utilization and client QoS.
- + Applying machine learning to automate the identification of congestion events on interdomain links.

Teaching Assistant, 6.UAR: Preparation for Undergraduate Research

September 2019 – Present

Teaching Assistant, 6.033: Computer Systems Engineering

February 2019 – May 2019

Massachusetts Institute of Technology | *Cambridge, MA*

Visiting Research Scientist supervised by Dr. Anja Feldmann

June 2017 – August 2017

Internet Network Architectures Group | Technical University of Berlin | *Berlin, Germany*

- + Analyzed public and private traceroute databases to identify hidden Internet peering infrastructure.

Volunteer Research Assistant to Drs. Jim Kurose and Arun Venkataramani

May 2015 – August 2016

University of Massachusetts Amherst | *Amherst, Massachusetts*

- + Evaluated GigaPaxos, a scalable consensus algorithm developed to support global DNS in MobilityFirst.
- + Processed Wi-Fi data from across the University to support studies of user mobility and differential privacy.

Professional Experience

Summer Intern, Space Communications and Navigation (SCaN)

June 2019 – August 2019

NASA Goddard Space Flight Center | *Greenbelt, MD*

- + Automated monitoring of NIST security controls for Space Network Ground Segment Sustainment (SGSS).
- + Developed network monitoring data visualizations for Delay/Disruption Tolerant Networking (DTN).

Co-op Software Engineer

May 2018 – December 2018

Akamai Labs | Akamai Technologies | *Cambridge, Massachusetts*

- + Research and development for the design of a high-throughput low-latency blockchain payment network.

Systems Administrator

November 2012– August 2016

University of Massachusetts Amherst | *Amherst, Massachusetts*

- + 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.

Technical Expertise

Programming: Python, Go, Bash, C/C++, Java, HTML/CSS/JavaScript, x64, LaTeX, Max, Clojure, Processing

Systems / Utilities: UNIX, TCP/IP, OpenStack, AWS, LDAP, SQL Server, Git, Wireshark, perf, eBPF, GDB

Hardware / Hobbies: Soldering, Woodworking, Ceramics, Sewing, FM Radio Engineering, Audio Production