



# Milo Trujillo

Scientist, Engineer, Activist



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## About Me

Milo Trujillo is a PhD student in Complex Systems and Data Science at the University of Vermont. His research focuses on sociotechnical analysis, especially examining the effect of platform design on community behavior. Past work includes studying the effects of community bans on Reddit, the growth of alt-right social media platforms, and comparing open-source team collaboration on and off of GitHub. Milo is also an analyst affiliated with Distributed Denial of Secrets, where he assists in making public-interest datasets accessible to journalists and scholars.

## Education

2024 (est)	Ph.D. Complex Systems and Data Science OCEAN project, advisors Laurent Hébert-Dufresne, James Bagrow	University of Vermont
2020	M.Sc. Computer Science Specializing in Network Science and Social Networks	Rensselaer Polytechnic Institute
2018	B.Sc. Dual Major (Magna Cum Laude) Computer Science and Science, Technology, and Society	Rensselaer Polytechnic Institute

## Work Experience

2020-	Doctoral Research Fellow Sociotechnical systems research, including theory, taxonomy, modeling, and network analysis for the Google and University of Vermont research group on Open-Source Complex Ecosystems And Networks	OCEAN, University of Vermont
2020-	Graduate Student Affiliate Computational social scientist with Harvard's Institute for Quantitative Social Science, identifying patterns in leaked documents regarding dark money, law enforcement, and institutional corruption	IQSS, Harvard University
2020-	Core Researcher Ongoing research on disinformation and community building within unsafe media platforms, including alternative social media created as a result of deplatforming	The Media Landscape (MeLa) Lab
2019-	Technical and Systems Designer Designing a collaboration platform for intentional community building and cross-community collaboration in volunteer-driven activism contexts	Pursuance Project
2019-	Data Scientist & Infrastructure Engineer Building and maintaining infrastructure for disseminating, searching, and analyzing leaked and FOIA-released documents. Systems must regularly migrate between hosting providers, and heavily feature torrents, docker, ansible, flask, elasticsearch, cross-site authentication	Distributed Denial of Secrets
2017-2018	Undergraduate Research Fellow Trained neural-networks to develop optimal network hierarchies for a wide variety of scenarios, and contributed to larger complexity research by postdocs and professors	Santa Fe Institute
2016-2017	INTROSEC Lecturer Presented fourteen workshops each semester on introductory security topics for RPISEC, RPI's computer security club. Developed each lecture and associated CTF challenges as well as a website to track participant progress	Rensselaer Polytechnic Institute
2016-2020	Founder, Lead Developer Serving as director of a non-profit protecting free speech and privacy by developing software to detect / evade censorship and surveillance	Daylighting Society

## Peer-Reviewed Publications

2021	Milo Z. Trujillo, Samuel F. Rosenblatt, Guillermo de Anda Jáuregui, Emily Moog, Briane Paul V. Samson, Laurent Hébert-Dufresne, Allison M. Roth	Workshop on Online Abuse and Harms (WOAH)
	When the Echo Chamber Shatters: Examining the Use of Community-Specific Language Post-Subreddit Ban	
2021	Jean-Gabriel Young, Amanda Casari, Katie McLaughlin, Milo Z. Trujillo, Laurent Hébert-Dufresne, James P. Bagrow	Mining Software Repositories (MSR)
	Which Contributions Count? Analysis of Attribution in Open Source	
2021	Amanda Casari, Katie McLaughlin, Milo Z. Trujillo, Jean-Gabriel Young, James P. Bagrow, Laurent Hébert-Dufresne	Nature Computational Science
	Open Source Ecosystems Need Equitable Credit Across Contributions	
2020	Milo Trujillo, et al	ACM Hypertext
	What is BitChute? Characterizing the "Free Speech" Alternative to YouTube	

## Non-Academic Publications

2022 (est)	Milo Trujillo	No Publisher Yet!
	Hacking the Planet from Hello World	
2021	Milo Trujillo	2600: The Hacker Quarterly
	Hosting Under Duress	

## Talks Presented

Jul 2020	<i>Hateful YouTube: Characterizing the Social Video-Hosting Platform BitChute</i> Presenter at the International Conference on Computational Social Science (IC2S2)
Feb 2020	<i>Collective Action: Meta-Collaborative Activism</i> Guest speaker in Environmental Media and Data course
Oct 2019	<i>Social Movements: Construction and Manipulation</i> Guest speaker in Hactivism course on social network mapping and intentional community design
May 2018	<i>How Twitter Activist Network Structures Respond to Internal and External Threats</i> Presented undergraduate thesis to faculty and doctoral students in the Science, Technology, and Society department
Jul 2017	<i>The Design and Impact of Bitcoin and other Cryptocurrencies</i> Presented to faculty, postdocs, and undergraduate researchers at the Santa Fe Institute
Apr 2017	<i>Extremism Analysis</i> Presented research on hate group organization and social patterns to undergraduate research symposium
Apr 2016	<i>The History of Malware and Malware-Analysis</i> Presented at the Association for Computing Machinery for Women (ACM-W) hackathon
Oct 2016	<i>Digital Privacy for Activists</i> Presented in "Hactivism" with the RPI cryptoparty
Apr 2015	<i>Understanding the Computer Fraud and Abuse Act</i> Presented to undergraduates & professors with the RPI cryptoparty

## Academic Reviews

2021	ICWSM
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## Open Source Projects

2021 - Theory	Decentralization Off The Shelf Contributor to a library of decentralized and peer-to-peer design patterns
2020 - Ruby, Bash	ServiceDispatch Monitors emergency service feeds, records and presents a log of all broadcasts
2018 - Python	SocMap Scrapes data and draws social graphs of Twitter communities
2017 - Python	Peekaboo A port-knocking daemon
2017 - Python	SnailDoor A socket-less backdoor for secured environments with webservers
2017 - Java, Obj-C	SpeakFree Microphone-jamming app to protect private conversations and distribute privacy tips
2016 - Java, Obj-C	Where Are the Eyes Crowd-sourced network for detecting surveillance as webapp and mobile apps
2016 - Misc	IntroSec Security competition, lectures, and resources for students
2016 - Ruby	Puddle Distributed and anonymous file sharing platform and search engine
2016 - Ruby	Paillier Implementation of a cryptosystem with additive homomorphism, detached signatures, and zero-knowledge proofs
2015 - Python	TorHost Hosts files over automatically created Tor Onion Services
2014 - Haskell	ChillFTP A complete, protocol compliant FTP daemon

## Graduate TA Teaching Experience

2020	<i>Operating Systems</i>	I also taught a zero-credit introductory security curriculum for three semesters, using my own lecture materials and lab assignments
2019	<i>Programming Languages</i>	
2018, 2019	<i>Data Structures</i>	

## Graduate Coursework

2021	<i>Principles of Complex Systems</i>
2021	<i>Modeling of Complex Systems</i>
2021	<i>Data Ethics</i>
2020	<i>Media Studies</i>
2019	<i>Networking in the Linux Kernel</i>
2019	<i>Design and Analysis of Algorithms</i>
2019	<i>Parallel Computing</i>
2019	<i>Ethics</i>
2018	<i>Frontiers of Network Science</i>
2018	<i>Network Resilience</i>