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#### Education

## **University of Vermont**

Sept. 2018 - Jan. 2024

Ph.D. Candidate, Department of Computer Science

- Advisor: Laurent Hébert-Dufresne
- Research Group: Laboratory of Structure and Dynamics

## St. Mary's College of Maryland

May 2018

Bachelor of Science in Sociology, Computer Science, and Mathematics

Summa Cum Laude, Phi Beta Kappa Honors Society

### **Positions**

## **Laboratory for Structure and Dynamics**

Aug. 2018 - present

## **Vermont Complex Systems Center, University of Vermont**

- Modeling interventions for network contagion
- Computational social science research on toxicity in online communities
- Large scale agent-based models of biosecurity in humans and livestock

## **Research Intern** — Center on Social Dynamics and Policy **Brookings Institution**

Jun. - Aug. 2021

- Agent-based modeling of policy interventions on COVID-19
- Work presented to U.S. Congress subcommittee and Whitehouse task force

## **Communications Director — Congregational Summer Assembly**

May - Aug. 2018

- Directed multiple social media accounts for a non-profit organization
- Conducted analytic testing for maximum engagement

## **REU (NSF) researcher** — Minority Health Disparities Initiative University of Nebraska-Lincoln

May 2016 - Aug. 2017

- Summer 2016:
  - Cleaned and analyzed interviews and field notes to construct network data
  - Network modeling of people who inject drugs in rural Puerto Rico
- Summer 2017:
  - Agent-based modeling of network contagion intervention given missing data
  - Trained 1st year REU students as first point of contact, underneath mutual mentor

## Student Consultant — Calvert Nature Society (CNS)

Jan. - May 2016

May - Aug. 2015

Hedonic pricing analysis of the effect of proximity to parks on home value using GIS

# Economics Research Assistant — Credit Risk Analysis Division

Office of the Comptroller of the Currency-U.S. Department of the Treasury Terabyte scale data management, cleaning, analysis, and visualization

- Algorithmic time complexity analysis

### Selected Honors and Awards

_	Best paper: Workshop on Computational Approaches to Subjectivity, Sentim	ent & Social
	Media Analysis (ACL WASSA)	2022
_	UVM Graduate College Travel Minigrant 20	18, 2019, 2022
_	1st Place: Best Project – Net-COVID workshop (University of Maryland)	2020
-	CEMS Graduate Student Scholarship	2019
-	NSF Fellowship: Quantitative and Evolutionary STEM Traineeship (QuEST)	2018-2020
-	Provost's Conference Funding Award for Southern Regional Honors Council	
	Annual Meeting	2017
_	Travel award: Emerging Researchers National (ERN) Conference in STEM	2017

#### Publications and Presentations

#### **Refereed Publications**

- 1. [Accepted] **Rosenblatt, S. F.**, O'Gara, D., Hébert-Dufresne, L., Purcell, R., Kasman, M., & Hammond, R. (2023, March). TRACE-Omicron: Policy Counterfactuals to Inform Mitigation of COVID-19 Spread in the United States. Advanced Theory and Simulations.
- 2. Minot, J., Trujillo, M. Z., **Rosenblatt, S. F.**, de Anda Jáuregui, G., Moog, E., Samson, B. P. V., Hébert-Dufresne, L., & Roth, A. M. (2022, May). Distinguishing In-Groups and Onlookers by Language Use. In Proceedings of the 12th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (pp. 127-137). Association for Computational Linguistics.
- 3. Warrick, M., **Rosenblatt, S. F.**, Young, J. G., Casari, A., Hébert-Dufresne, L., & Bagrow, J. P. (2022, May). The OCEAN mailing list data set: Network analysis spanning mailing lists and code repositories. In 2022 IEEE/ACM 19th International Conference on Mining Software Repositories (MSR) (pp. 484-488). IEEE.
- 4. Trujillo, M., **Rosenblatt, S. F.**, de Anda Jáuregui, G., Moog, E., Samson, B. P. V., Hébert-Dufresne, L., & Roth, A. M. (2021, August). When the Echo Chamber Shatters: Examining the Use of Community-Specific Language Post-Subreddit Ban. In Proceedings of the 5th Workshop on Online Abuse and Harms (WOAH 2021) (pp. 164-178). Association for Computational Linguistics.
- 5. **Rosenblatt, S. F.**, Smith, J. A., Gauthier, G. R., & Hébert-Dufresne, L. (2020). Immunization strategies in networks with missing data. PLOS Computational Biology, 16(7), e1007897.

#### **Oral Presentations**

- 1. **Rosenblatt, S. F.**, Casari, A., Dey, S., Woods, W., & Hébert-Dufresne, L. (2022, July). Open is not always welcoming: Examining how toxic interpersonal signals impact and reflect collaboration and prestige in the open-source Python language development community. Sunbelt 2022
- 2. **Rosenblatt, S. F.**, Warrick, M., Young, J. G., Casari, A., Hébert-Dufresne, L., & Bagrow, J. P. (2022, April). The OCEAN mailing list dataset: network analysis spanning mailing lists and code. University of Vermont Student Research Conference.

- 3. **Rosenblatt, S. F.**, & Hébert-Dufresne, L. (2021, July). Effectiveness of strategic synchronous snowball sampling for network immunization. In Networks 2021: A Joint Sunbelt and NetSci Conference.
- 4. **Rosenblatt, S. F.**, & Minot, J. (2020, July). Top(ological) news: Examining the social-media discourse around current events as a dynamic weighted network. Sunbelt 2020.
- 5. **Rosenblatt, S. F.**, Shugars, S., Hébert-Dufresne, L., & Dombrowski, K. (2019, June). Viable targeted immunization strategies in complex networks: Addressing the boundary specification problem. Sunbelt 2019
- 6. **Rosenblatt, S.F.**, Smith, J. Gauthier, R.G., Making the Most of the Network Data We Have: The Robustness of Efficacy for Targeted Immunization Strategies (2018). Sunbelt 2018, NetSci 2018 Satellite (Contagion & Networks), and Southern Regional Honors Council Conference

#### **Posters**

- 1. **Rosenblatt, S. F.**, Smith, J. A., Gauthier, G. R., & Hébert-Dufresne, L. (2020, September). Strategic Synchronous Snowball Sampling Immunization. NetSci 2020
- 2. **Rosenblatt, S. F.**, & Dombrowski, K. (2017). Efficacy-Robustness: Optimizing Network-Based Disease Interventions in Realistic Data Collection Scenarios. University of Nebraska-Lincoln Summer Research Symposium.
- 3. **Rosenblatt, S. F.**, & Dombrowski, K. (2017). Stable Bridges: Using Risk Brokerage to Inform Intervention Targeting Strategies in Disease Networks. Emerging Researchers National Conference.
- 4. **Rosenblatt, S. F.**, & Dombrowski, K. (2016). Hidden Risk: Examining Risk Brokerage in Intravenous Drug User Networks in Rural Puerto Rico. University of Nebraska-Lincoln Summer Research Symposium

### **Other Publications**

- 1. **Rosenblatt, S. F.**, O'Gara, D., Hébert-Dufresne, L., Purcell, R., Kasman, M., & Hammond, R. (2023, March). TRACE Omicron and Beyond. Web publication
- 2. **Rosenblatt, S. F.**, Lohff, E., Kruse, L. Henderson, A. The Value of Preserved Land: A Hedonic Pricing Analysis of Land Use in Calvert County, Maryland (2016). Whitepaper

## Teaching

Graduate Teaching Assistant – Introduction to Python

- 2020
- Peer Mentor and Assistant Instructor Cities: Place and Space, freshman seminar 2017
  - Assisted all aspects including creation of the syllabus and lesson plans
- Undergraduate Teaching Assistant Survey of Mathematics

## Talks and Invited Lectures

_	Guest Lecture – QuEST Graduate Seminar: Introduction to cluster computing	2022
_	Invited talk – Complex Systems Society 2022 conference warm-up panel: Networking	
	about networks over (internet) networks	2022
_	Guest Lecture – Modeling Complex Systems: ABMs on networks 2019, 20	21, 2022
_	Student Complexity Research and Pizza Seminar (SCRaPS)	
	<ul> <li>Network science in swine biosecurity</li> </ul>	2023
	<ul> <li>Introduction to cluster computing at UVM</li> </ul>	2022
	<ul> <li>Strategic synchronous snowball sampling for network immunization</li> </ul>	2021
	<ul> <li>Network immunization and the boundary specification problem</li> </ul>	2020
	<ul> <li>Targeted immunization on networks with missing data</li> </ul>	2019

### Service

## Outreach Officer — Society of Young Network Scientists (SYNS)

2019 - present

- Elected director of outreach for 300+ member international organization
- Lead organizer for NetSci2020 Pre-Conference Workshop with speakers Federico Levi (Nature) and Serena Bradde, Dario Corradini (Physical Review E/Physical Review X)
- Lead organizer for Networks 2021 (Joint NetSci and Sunbelt Conference) SYNS Pre-Conference Workshop with speakers Sune Lehman and Alice C. Schwarze

## Student Complexity Research and Pizza Seminar (SCRaPS)

2022- present

Co-lead organizer for weekly lunch seminar series

### Science Outreach & Communication QuEST group (SOCQs)

- Organized "A Skeptic's Guide to Scientific Writing" Dr. Stefano Allesina
- Organized "Managing Academic, Private and Public Partnerships" Dr. Melissa Nolan 2019

## Disease Detectives — Judge/Event Designer: Vermont Science Olympiad

2019, 2021, 2022

Organized, led, and scored an event for a statewide competition

## **Chair — Young Assembly Adults Subcommittee (YAAS)**

Aug. 2018 - present

 Founded subcommittee to organize volunteer activities for young adults within a cooperative living community in northern Michigan

## Membership

_	Communications Committee – Congregational Summer Assembly	2018 - present
_	Alpha Kappa Delta (sociology honor society) - Mu Chapter	2017 - present
_	Philosophy Club Treasurer – St. Mary's College of Maryland	2017 - 2018
_	Math Club Treasurer – St. Mary's College of Maryland	2015 - 2016
_	LINK Group Network Science Consortium	2016 - present

# Professional Development

_	Privacy and Ethics in Pandemic Data Collection and Processing Workshop,	
	Brown University School of Public Health, Providence, RI	2023
_	Complex Networks Winter Workshop, Virtual	2021
_	Net-COVID: Understanding and Exploring Network Epidemiology in the Time of	
	Coronavirus	2020
_	Complex Networks Winter Workshop, Quebec City	2019
_	Complex Networks Winter Workshop, Quebec City	2018