

# Siqi Wu

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<https://avalanchesiqi.github.io>

**Research areas** Computational social science; social computing; network science; content consumption; political polarization; digital media; data quality



**Academic appointments** **University of Michigan** Ann Arbor, MI, USA 2021.01 - present  
*Postdoctoral Research Fellow*, School of Information. Advisor: Paul Resnick  
**Australian National University** Canberra, ACT, Australia 2020.09 - 2021.03  
*Research Fellow*, School of Computing. Advisor: Lexing Xie

**Education** **Australian National University** Canberra, ACT, Australia 2016.06 - 2021.04  
Ph.D. in Computer Science. Advisor: Lexing Xie  
**University of Melbourne** Melbourne, VIC, Australia 2013.07 - 2015.07  
M.S. in Information Technology. Advisor: Richard Sinnott  
**Tianjin University** Tianjin, China 2008.09 - 2012.06  
B.E. in Electronics Engineering. Advisor: Yugong Wu

**Awards** AAAI ICWSM Best Senior Program Committee 2022, 2023  
AAAI ICWSM Spotlight Paper 2021  
ACM CSCW Best Paper Honorable Mention 2019  
Google PhD Fellowship 2018  
NICTA PhD Scholarship 2016 – 2020

**Publications** \* Equal authorship ^ Corresponding author

- [1] Liu, A., **Wu, S.**, & Resnick, P. (2024). “How to Train Your YouTube Recommender to Avoid Unwanted Videos.” To appear in *the 18th International AAAI Conference on Web and Social Media (ICWSM’24)*.
- [2] Cai, Y., Xie, L., & **Wu, S.**^ (2023) “The Shapes of the Fourth Estate during the Pandemic: Profiling COVID-19 News Consumption in Eight Countries.” *Proceedings of the 26th ACM Conference on Computer-Supported Cooperative Work (CSCW’23)*.
- [3] Pfeffer, J., Matter, D., Jaidka, K., Varol, O., Mashhadi, A., Lasser, J., Assenmacher, D., **Wu, S.**, Yang, D., Brantner, C., Romero, D. M., Otterbacher, J., Schwemmer, C., Joseph, K., Garcia, D., & Morstatter, F. (2023). “Just Another Day on Twitter: A Complete 24 Hours of Twitter Data.” *Proceedings of the 17th International AAAI Conference on Web and Social Media (ICWSM’23)*.
- [4] **Wu, S.** (2022). “Measuring Collective Attention in Online Content.” *ACM SIGWEB Newsletter*.
- [5] Lee, J.,\* **Wu, S.**,\* Ertugrul, A. M.,\* Lin, Y.-R., & Xie, L. (2022). “Whose Advantage? Measuring Attention Dynamics across YouTube and Twitter on Controversial Topics.” *Proceedings of the 16th International AAAI Conference on Web and Social Media (ICWSM’22)*.

- [6]  **Wu, S.**, & Resnick, P. (2021). “Cross-Partisan Discussions on YouTube: Conservatives Talk to Liberals but Liberals Don’t Talk to Conservatives.” *Proceedings of the 15th International AAAI Conference on Web and Social Media (ICWSM’21)*. **Spotlight Paper (top 8)**
- [7] Shin, M.,\* Tran, A.,\* **Wu, S.**,\* Mathews, A., Wang, R., Lyall, G., & Xie, L. (2021). “AttentionFlow: Visualising Influence in Networks of Time Series.” In *Proceedings of the 14th ACM International Conference on Web Search and Data Mining (WSDM’21)*.
- [8] Cheng, L., Shu, K., **Wu, S.**, Silva, Y. N., Hall, D. L., & Liu, H. (2020). “Unsupervised Cyberbullying Detection via Time-Informed Gaussian Mixture Model.” In *Proceedings of the 29th ACM International Conference on Information and Knowledge Management (CIKM’20)*.
- [9] **Wu, S.**, Rizoiu, M. A., & Xie, L. (2020). “Variation across Scales: Measurement Fidelity under Twitter Data Sampling.” *Proceedings of the 14th International AAAI Conference on Web and Social Media (ICWSM’20)*.
- [10]  **Wu, S.**, Rizoiu, M. A., & Xie, L. (2019). “Estimating Attention Flow in Online Video Networks”. *Proceedings of the 22nd ACM Conference on Computer-Supported Cooperative Work (CSCW’19)*. **Best Paper Honorable Mention (top 5%)**
- [11] **Wu, S.**, Rizoiu, M. A., & Xie, L. (2018). “Beyond Views: Measuring and Predicting Engagement in Online Videos.” *Proceedings of the 12th International AAAI Conference on Web and Social Media (ICWSM’18)*.
- [12] Kong, Q., Rizoiu, M. A., **Wu, S.**, & Xie, L. (2018). “Will This Video Go Viral? Explaining and Predicting the Popularity of YouTube Videos.” In *Companion Proceedings of the The Web Conference (WWW’18 Companion)*.
- [13] **Wu, S.**, Morandini, L., & Sinnott, R. O. (2015). “SMASH: A Cloud-Based Architecture for Big Data Processing and Visualization of Traffic Data.” In *Proceedings of the IEEE International Conference on Data Science and Data Intensive Systems (DSDIS’15)*.

#### Working papers

- [1] **Wu, S.**, & Resnick, P. “Prevalence Estimation in Social Media Using Black Box Classifiers.”
- [2] **Wu, S.**, & Resnick, P. “How Many Hateful, Offensive, and Toxic Messages Are Posted Online Everyday?”
- [3] Schöpke-Gonzalez, A., **Wu, S.**, Kumar, S., Resnick, P., & Hemphill, L. “How We Define Harm Impacts Data Annotations: Explaining How Annotators Distinguish Hateful, Offensive, and Toxic Comments.”
- [4] **Wu, S.**, Rajadesingan, A., Budak, C., Garrett, K., Sude, D., & Resnick, P. “ACT: Active Crowd Training for Crowdsourced Labeling.”

#### Teaching

*Instructor* in ICWSM 2023 tutorial “Prevalence Estimation in Social Media Using Black Box Classifiers” (2023)

*Teaching Assistant* in ANU course COMP6490 “Document Analysis” (2017, 2018)

*Teaching Assistant* in ANU course COMP1030 “Art of Computing” (2017)

#### Mentoring

Alexander Liu (UMich PhD)

Zain Padamsee (Bowdoin College undergrad)

Cai Yang (ANU undergraduate) → Saarland University/Max Planck Institute

Services	ICWSM 2023 Poster, Demo, and Dataset Track Co-chair	
	ICWSM 2022 Student Volunteer and Scholarship Chair	
	Senior Program Committee	
	<ul style="list-style-type: none"> <li>• ICWSM (2022 – 2024)</li> </ul>	
	Conference Program Committee/Reviewer	
	<ul style="list-style-type: none"> <li>• TheWebConf (2019, 2020, 2023, 2024)</li> <li>• WebSci (2022 – 2024)</li> <li>• IC2S2 (2023, 2024)</li> <li>• CHI (2024)</li> <li>• CSCW (2019 – 2023)</li> <li>• ICIS (2022, 2023)</li> <li>• CIKM (2023)</li> <li>• ASONAM (2021, 2022)</li> <li>• ICWSM (2017, 2018, 2021)</li> <li>• AAI (2019)</li> </ul>	
	Ad Hoc Journal Reviewer	
	<ul style="list-style-type: none"> <li>• EPJ Data Science</li> <li>• Collective Intelligence</li> <li>• Social Science Computer Review</li> <li>• ACM Transactions on Information Systems</li> </ul>	
Invited talks	Gradient Institute, Jul 2022	
	UChicago Human+AI Lab, Nov 2021	
	Meta Core Data Science, Aug 2021	
	Tsinghua Future Intelligence Lab, May 2021	
	Google PhD Summit, Jul 2019	
	ANU CECS Winter School, Jul 2019	
Industry experience	<b>MicroStrategy</b> Hangzhou, Zhejiang, China <i>Software Engineer</i> , Big Data Engine team	2015.09 - 2016.05
	<b>Baidu</b> Beijing, China <i>Software Developer Intern</i> , Baidu Maps team	2014.12 - 2015.02
Miscellaneous	Co-organized the Computational Media Lab winter workshop 2019	
	Long-distance running: 60+ (ultra) marathons finisher, 2:42 marathoner	