

Jeffrey Gleason

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🌐 <http://jlggleason.github.io>

🔗 <https://github.com/jlggleason>

Education

- 2021 – 2026 **Northeastern University**, Ph.D. Computer Science
- Advisor: Christo Wilson
 - Coursework: Causal Inference, Bayesian Statistics, Statistics, Advanced Algorithms, GPA 4.00
- 2014 – 2018 **Princeton University**, B.A. Computer Science
- Thesis: *Accuracy and Fairness: An Analysis of Risk Assessment Algorithms in the Criminal Justice System*
 - Summa Cum Laude, GPA 3.81

Professional Experience

- 2023 **National Internet Observatory**, Data Scientist
- Built Spark pipelines to process web extension user data, including parsing HTML and inferring clicks and active time on page using WebExtension API events
- 2020 – 2021 **Kungfu.ai**, Machine Learning Engineer
- Implemented weakly supervised image segmentation (PyTorch, TensorFlow) and time series forecasting methods (GluonTS) for DARPA D3M (automated ML) research program
 - Developed first version of internal auditing framework, including Model Cards and Datasheets
- 2018 – 2020 **New Knowledge, Jr.** Machine Learning Engineer
- Implemented interpretability methods and natural language style transfer (Transformers) for DARPA D3M and ASED (social engineering defense) research programs
 - Applied research to identify and characterize disinformation campaigns on social media

Publications

- Gleason, J.**, Koeninger, A., Hu, D., Teurn, J., Bart, Y., Knight, S., ... Wilson, C. (2024). Search engine revenue from navigational and brand advertising. In *Proceedings of the international aaai conference on web and social media*.
- Hu, D., **Gleason, J.**, Aziz, M. A. B., Koeninger, A., Guggenberger, N., Robertson, R. E., & Wilson, C. (2024). Market or markets? investigating google search's market shares under vertical segmentation. In *Proceedings of the international aaai conference on web and social media*.
- Gleason, J.**, Hu, D., Robertson, R. E., & Wilson, C. (2023). Google the gatekeeper: How search components affect clicks and attention. In *Proceedings of the international aaai conference on web and social media*. **Best Paper**.
- Langevin, S., Bethune, C., Horne, P., Kramer, S., **Gleason, J.**, Johnson, B., ... Bradley, A. (2021). Useable machine learning for sentinel-2 multispectral satellite imagery. In *Image and signal processing for remote sensing xxvii* (Vol. 11862, pp. 97–114). SPIE.
- Gleason, J. L.** (2020). Forecasting hierarchical time series with a regularized embedding space. In *Milets '20: 6th kdd workshop on mining and learning from time series*.
- Corcoran, C., DiResta, R., Morar, D., Dhamani, N., Sullivan, D., **Gleason, J. L.**, ... Ruppel, B. (2019). Disinformation: Detect to disrupt. In *Truth and trust online conference*.
- Dhamani, N., Azunre, P., **Gleason, J. L.**, Corcoran, C., Honke, G., Kramer, S., & Morgan, J. (2019). Using deep networks and transfer learning to address disinformation. In *Icml ai for social good workshop*.

Under Review

- Gleason, J.**, Ghosh, A., Robertson, R. E., & Wilson, C. (Under review). Perceptions in pixels: Analyzing perceived gender and skin tone in real-world image search results.

Academic Service

- 2024 ICWSM PC Member
EPJ Data Science Reviewer
- 2023-24 IC²S² PC Member
- 2022-23 FAcCT PC Member
- 2022 WWW subreviewer
Journal of Online Trust and Safety (JOTS) Reviewer

Skills

Coding Python (pyspark, pytorch, tensorflow), R, SQL, Javascript

Open Source Contributions

- 2022 Added E-value sensitivity analysis method to DoWhy causal inference library
- 2021 Added parsing support for special Google Search components (e.g. knowledge-panels) to WebSearcher