Joseph Harrison

</> joeh.netlify.com ✉ joe.harrison.va@gmail.com

EDUCATION

Virginia Polytechnic Institute and State University — Anticipated June 2024
Bachelor of Science in Computational Modeling and Data Analytics — GPA: 3.71/4.0
Bachelor of Science in Statistics

Rockbridge County High School (Dual Enrollment at Dabney S. Lancaster) — June 2020
Advanced Studies Diploma — GPA: 4.22/4.0

INTERESTS

Imprecise Probability, Bayesian Modeling, Statistical Inference, Learning Algorithms

HONORS AND AWARDS

Dean's List at Virginia Tech for six semesters	2020-2023
Intelligence Community Centers for Academic Excellence (IC CAE) Scholar	Aug. 2020 - July 2021
Virginia Tech National Security Institute & Hume Center IC CAE Research Fellow	Aug. 2021 - Aug. 2022
Alice and Luther Hamlett Scholarship (For excellency in CMDA)	March 2022
Clyde Kramer Scholarship (For success in Statistics)	August 2022
Honors College Scholarship	April 2022

PUBLICATIONS

Harrison, L., **Harrison, J. R.**, Boswell, M. G., & Michaels, A. J. (2022, October). A Hierarchical Database of One Million Websites. In 2022 IEEE Secure Development Conference (SecDev) (pp. 67-68). IEEE.

Harrison, J., Lyons, J., Anderson, L., Maunder, L., O'Donnell, P., George, K. B., & Michaels, A. J. (2021, November). Quantifying use and abuse of personal information. In 2021 IEEE International Conference on Intelligence and Security Informatics (ISI) (pp. 1-6). IEEE.

Maunder, L., Lyons, J., Anderson, L., **Harrison, J.**, Timana-Gomez, B., O'Donnell, P., George, K. B., & Michaels, A. J. (2021, November). Identifying Corporate Political Trends Online. In 2021 IEEE International Conference on Intelligence and Security Informatics (ISI) (pp. 1-6). IEEE.

O'Donnell, P., **Harrison, J.**, Lyons, J., Anderson, L., Maunder, L., Ramboyong, S., & Michaels, A. J. (2021, October). Quantitative rubric for privacy policy analysis. In International Workshop on Data Privacy Management (pp. 39-54). Cham: Springer International Publishing.

CONFERENCE PRESENTATIONS

A Hierarchical Database of One Million Websites: Poster at the 2022 IEEE Secure Development Conference (SecDev). 18 October 2022

Use and Abuse of Personal Information – Collection: Poster Talk at the 2022 National Security Education Program Colloquium. 12 April 2022

Use and Abuse of Personal Information: Poster at the 2022 Commonwealth Cyber Initiative Symposium. 04 April 2022 04/04/2022

Accommodation in Singaporean English: Poster at the 2022 Dennis Dean Undergraduate Research and Creative Scholarship Conference. 29 April 2022

Quantitative Rubric for Privacy Policy Analysis: Poster Talk at the 2021 European Symposium on Research in Computer Security (ESORICS) and 16th International Workshop on Data Privacy Management. 05 October 2021

Captioning chefs: Examining ideologies of intelligibility through selective subtitles in Diners, Drive-Ins and Dives: Poster Talk at 2021 Virginia Area Linguistics (VALING). April 17, 2021

Diners, Drive-Ins and Dialects: Poster Talk at the 2021 Southeastern Conference on Linguistics (SECOL). May 13, 2021

Diners, Drive-Ins and Dialects: Poster at the 2021 Dennis Dean Undergraduate Research and Creative Scholarship Conference (presented on language dialects). April 30 2021

RESEARCH & EXPERIENCE

Use and Abuse of Personal Information | *Student Researcher*   August 2020 – August 2022
- Published three papers (in IEEE and ACM) pertaining to our work in the privacy and security space.
- Led a team on identifying and collecting information needed to scale our experiment up to 100,000 fake identities. Coordinated with technical team, and contributed to overarching design of this large-scale project.
- Spearheaded Literature Review, and designed protocols for interacting with the Dark Web.
- Helped create a framework to validate privacy policies, and then reviewed them.

The Speech Lab | *Student Researcher*   August 2020 – June 2022
- Coded Linguistics Experiment through Gorilla and Javascript.
- Spearheaded Literature Review, and presented work at Virginia Tech's Research symposium.
- Prepared data for analysis, and presented literature reviews.

Data in our Lives | *Teaching Assistant*   August 2023 – Present
- Assisted professor with grading papers and available for office hours. Worked with students to understand material presented in class.

Quantitative Ecological Dynamics Lab | *Student Researcher*   Sept 2023 – Present
- Will help develop an R package, modeling temperature curves in a Bayesian framework.
- Digitization of data across the literature

SKILLS

Languages: R, Python, SQL, Javascript, Java, MPI, LaTeX, Matlab, C, SAS
Tools: Git/GitHub, Unix Shell, PostgreSQL, VS Code, RStudio, Vim, Netlify, Blender
Libraries: pandas, NumPy, Matplotlib, psycopg, ggplot2, Tidyverse, Shiny

PROJECTS

Personal Website | *Javascript, HTML, Git, Unix Shell, VS Code, Python, R*   May 2023 – Present
- Analyzed *100 Million* chess games, all played on lichess.org in the month of April.
- Independently learned psycopg, PostgreSQL, dbplyr, for data wrangling. ~1000 Lines of code.
- Learned web development to launch a static website, with interactive elements via Javascript and iframes.
- Solved problems related to building a medium scale application (detailed on https://joeh.netlify.com).