

# Joseph Harrison

✈ [joeh.netlify.com](https://joeh.netlify.com)  [github.com/mkw-TL](https://github.com/mkw-TL)  [joe.harrison.va@gmail.com](mailto: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*

## RELEVANT COURSEWORK

**Courses:** Computational Modeling & Data Analytics Capstone (In-Progress), Machine Learning, Big Data Analytics (In-Progress), Applied Time Series, Experimental Designs, Theoretical Statistics, Methods of Regression Analysis, Software Design & Data Structures, Intermediate Python (In-Progress), Technical Writing

**Awards:** Dean's List at Virginia Tech (6 times), Intelligence Community (IC CAE) Scholar & Research Fellow, Recipient of scholarships for excellency in CMDA, Statistics, and the Honors College.

## SKILLS

**Languages:** R, Python, SQL, Javascript, Java, MPI, L<sup>A</sup>T<sub>E</sub>X, Matlab, C, SAS

**Tools:** Git/GitHub, Unix Shell, PostgreSQL, VS Code, RStudio, Vim, Netlify, Blender

**Libraries:** pandas, NumPy, Matplotlib, psycopg, ggplot2, Tidyverse, Shiny

## WORK 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.
- Lead 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.
- Volunteered 2020. 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.
- Volunteered 2020. Prepared data for analysis, and presented literature reviews.

### Data in Our Lives | *Teaching Assistant*

August 2020 – June 2022

- Assisted several students comprehend material

### Quantitative Ecological Dynamics Lab | *Student Researcher*

September 2023 – Present

- Will help develop an R package, modeling temperature curves in a Bayesian framework.
- Developed skills pertaining to rapid acquisition of knowledge, through dense subject matters.

## 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 pertaining to a medium scale application (detailed on <https://joeh.netlify.com>).

## PAPERS

### Quantifying Use and Abuse of Personal Information | *Joe Harrison, ..., Alan J. Michaels*

November 2021

Presented and Published at the 2021 IEEE International Conference on Intelligence and Security Informatics

### Quantitative Rubric for Privacy Policy Analysis

October 2021

*Paul O'Donnell, Joe Harrison, ..., Alan J. Michaels* | Publication in Data Privacy Management

### A Hierarchical Database of One Million Websites

October 2022

*Luna Harrison, Joe Harrison, Madison G. Boswell, Alan J. Michaels* | Published in IEEE Sec Dev