

Talia Duffy

taliagd2@illinois.edu ◇ (847) 915-8426 ◇ LinkedIn
710 W Green St Apt 201, Urbana, IL 61820

EDUCATION

University of Illinois Urbana-Champaign

Urbana, IL

B.S. in Statistics and B.S. in Journalism

08/2021 - 05/2025

GPA: 4.0/4.0; STAT-MS Prep Track; Minor in Mathematics

PROFESSIONAL EXPERIENCE

Sandia National Laboratories

Albuquerque, NM

Research & Development Intern

05/2024 - Present

- Completed project to research, test, & improve sensitivity analysis methods for set-based concurrent engineering data; created new sensitivity analysis tool (R, MATLAB) for a component design app
- Wrote a technical report on the sensitivity analysis project; published on OSTI.gov (DOE Office of Science and Technical Information)
- Presented a research poster at the National Museum of Nuclear Science and History
- Used simulations, statistical models, and visualizations to help fix an electronic tester
- Active holder of Q-level DOE security clearance

University of Illinois Department of Statistics

Champaign, IL

STAT/CS 107: Data Science DISCOVERY Course Assistant

01/2022 - Present

- Helped lead programming lab sections and office hours for UIUC's flagship data science course; taught course content; assisted with debugging code, computer setup
- Created educational videos for the DISCOVERY YouTube, covering course topics (introductory statistics, Python programming) and difficult assignment questions; many videos gained 1,000s of views
- Contributed to the public launch of DISCOVERY's online platform for data science education, including writing educational articles with sample Python code

STAT 410: Probability and Statistics II Course Assistant

01/2024 - 05/2024

- Graded homework and exams for an undergraduate/early masters mathematical statistics course
- Proctored midterm and final exams for around 200 students

Investigate Midwest (Midwest Center for Investigative Reporting)

Champaign, IL

Data Journalism Intern

06/2023 - 08/2023

- Produced a data-driven investigative story based on a dataset of research grants; story combined research, records requests, data analysis with Python, data visualizations, and interviews
- Created three "Graphics of the Week" by cleaning and analyzing datasets before designing interactive data visualizations with Datawrapper; wrote short articles to contextualize visualizations
- Ensured transparency by writing "reporter's diaries" to explain to readers how datasets were sourced, verified, cleaned, analyzed, etc.
- Assisted with other tasks, such as writing research dossiers, constructing timelines, and giving data analysis advice

The Daily Illini

Champaign, IL

Assistant Opinions Editor & Columnist

11/2021 - 01/2024

- Directed a team of writers to create opinion columns for the independent student newspaper; met with writers to edit for AP style, content, structure, flow, etc
- Wrote columns about politics, social issues, campus issues, entertainment, etc; interviewed students and community members for Q&A articles
- Prepared presentations for and conducted weekly section meetings

PROJECTS

Congressional Resignations Data Visualization

- Created an interactive data visualization with FiveThirtyEight's congressional resignations dataset; developed in R with ggplot2 and tidyverse
- Formatted as a shiny app and hosted online with shinyapps.io ([Link](#))

DS + Journalism Degree Plan & Advocacy

- Drafted a curriculum plan for B.S. degree in Journalism + Data Science, including ideas for a data journalism practicum and capstone projects
- Connected staff from the journalism and statistics departments to discuss ideas for future interdisciplinary education in Data Science and Journalism; promoted ideas to College of Media faculty
- Wrote opinion piece for the student newspaper in support of the degree and data journalism

Illinois Statistics Datathon 2023

- Created a survival analysis model with Python (scikit-learn) to predict the number of charge-offs a credit company will use in 2023; placed in the top 10 of all competing teams

FEATURED WRITING

- For Investigate Midwest: *The National Pork Board gives more grant money than any other checkoff. Critics say it favors Big Pork.* ([Link](#))
- For CU-CitizenAccess: *Racial disparity in Urbana police traffic stops highest in 10 years* ([Link](#))
- For The Daily Illini: *Opinion | Data is the future of UI's journalism department* ([Link](#))
- For CU-CitizenAccess: *East Urbana residents have filed dozens of environmental complaints against Emulsicoat asphalt plant — and they're not stopping* ([Link](#))
- For Sandia National Laboratories: *Sensitivity Analysis for the Component Design App: Analysis of Success Assured Data* (SAND2024-15407)

HONORS AND AWARDS

- Phi Beta Kappa
- Chancellor's Scholar (Campus Honors Program)
 - Outstanding Senior Award and Scholarship, 2024
- James Scholar Honors Program, College of Media
- Marilyn Miller Kaytor Scholarship, College of Media
- Dean's List, College of Media, Fall 2021 through Spring 2024

SKILLS

R, RMarkdown, Python, MATLAB, SQL, Git, Excel

Adobe (Premiere Pro, Photoshop, Bridge), Freedom of Information Requests (FOIA / records requests), AP Style, multimedia production, journalistic writing, interviewing, and editing, SNO Sites / WordPress