

Zachary Fried

+1-503-919-1026 | friedz@terpmail.umd.edu | [zacharyfried.github.io](https://github.com/zacharyfried)

[in](https://www.linkedin.com/in/friedz) friedz | [github](https://github.com/zacharyfried) zacharyfried | Baltimore, MD - 21230, USA

EDUCATION

- **University of Maryland** August 2024 - Present
BS, Computer Science (2nd Bachelor's degree) College Park, MD
- **Oregon State University** September 2015 - September 2019
BS, Chemistry Corvallis, Oregon
 - GPA: 3.66

EXPERIENCE

- **Axle Informatics/National Institutes of Health (NIH)** May 2024 - Present
Linux Administrator and Data Processor (Contractor) Baltimore, MD
 - Automated backups, monitored file system integrity, and optimized data processing by developing custom Bash, Python, and MySQL scripts, resolving system overloads and improving operational efficiency.
 - Deployed and managed Docker containers to host web applications and authentication services, boosting system scalability.
 - Authored technical documentation, including installation guides and system configurations, adopted by multiple research labs to enhance efficiency.
- **National Institute on Drug Abuse (NIDA/NIH)** August 2022 - May 2024
Postbaccalaureate Research Fellow Baltimore, MD
 - Engineered a scalable data pipeline to process large-scale Reddit datasets, implementing text normalization, tokenization, and dictionary extraction techniques to ensure high data quality.
 - Optimized data transformation scripts, standardizing smartphone sensor data for seamless integration with a digital biomarker analysis platform.
 - Developed a program utilizing multiple APIs, including OpenAI's API, to automate literature review and meta-analysis paper selection processes.
- **Cell, Developmental and Cancer Biology - OHSU** Summer 2018
Undergraduate Intern Portland, OR
 - Added functionality to an R package to compare 3D structures in cancer treatment plans using the Sørensen-Dice coefficient, improving accuracy and efficiency in radiation oncology software.
- **Providence Portland Medical Center Earle A. Chiles Research Institute** Summer 2016
Undergraduate Intern Portland, OR
 - Created a bioinformatics workflow using the Galaxy platform to analyze genomic data.

SKILLS

- **Programming Languages:** Bash, Python, R (including packages and libraries such as Pandas, Numpy, Matplotlib, Seaborn for Python; dplyr, ggplot2, readr, stringr, lubridate, jsonlite for R)
- **Database Management:** Proficient in SQL with experience in MySQL, SQLite, MariaDB
- **Development Tools:** Experienced with Git, GitHub, Docker, AWS

PUBLICATIONS

C=CONFERENCE, J=JOURNAL, S=IN SUBMISSION, T=THESIS

- [J.1] S. Giorgi, T. Liu, K. Isman, Z. Fried, J. Sedoc, B. Curtis. (2024). **Evaluating generative AI responses to real-world drug-related questions**. In *Psychiatry Research*, Vol. 339, Article 116058.
- [J.2] S. Giorgi, T. Liu, A. Aich, K. Isman, G. Sherman, Z. Fried, J. Sedoc, L.H. Ungar. (2024). **Explicit and Implicit Large Language Model Personas Generate Opinions but Fail to Replicate Deeper Perceptions and Biases**. In *arXiv preprint arXiv:2406.14462*.
- [C.1,2] Z. Fried, et al. (2024). **Exploring Sexualized Cannabis Use: A Linguistic Analysis of User Experiences**. Presented at the International Conference on Computational Social Science (IC2S2), University of Pennsylvania, July 18-20, 2024; the International AAAI Conference on Web and Social Media (ICWSM), June 3-6, 2024, Buffalo, New York, USA; and the College on Problems of Drug Dependence (CPDD).
- [T.1] Z. Fried. (2019). **Application of a Weighted Dice Similarity Coefficient (DSC) for Structure Comparison in Radiation Treatment Planning**. Bachelor's thesis, Honors College, Oregon State University.