Zachary Fried

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in friedz | 🖸 zacharyfried | 🞓 Scholar | Baltimore, MD

EDUCATION

University of Maryland

BS, Computer Science (2nd Bachelor's degree) • GPA: 4.00

 Oregon State University BS, Chemistry

EXPERIENCE

Axle Informatics/National Institutes of Health (NIH) []

Linux Administrator and Data Processor (Contractor)

- 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) [

Postbaccalaureate Research Fellow

• 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 []

Undergraduate Intern

 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.

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.
- S. Giorgi, T. Liu, A. Aich, K. Isman, G. Sherman, Z. Fried, J. Sedoc, LH. Ungar. (2024). Explicit and Implicit **[**].2] 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.

SKILLS

- Programming Languages: Java, 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

College Park, MD

August 2024 - Present

September 2015 - September 2019 Corvallis, OR

> May 2024 - Present Baltimore, MD

Baltimore, MD

August 2022 - May 2024

Summer 2018

Portland, OR