

Zachary Fried

friedz@terpmail.umd.edu | zacharyfried.github.io | linkedin.com/in/friedz | github.com/zacharyfried

Education

University of Maryland

B.S. in Computer Science, second bachelor's degree; GPA: 3.97

College Park, MD

Aug. 2024 – Present

Oregon State University

B.S. in Chemistry

Corvallis, OR

Sept. 2015 – Sept. 2019

Experience

Textron Specialized Vehicles

Incoming PACE Software Engineering Intern

Summer 2026

Augusta, GA

- Expected to work on server-side systems using JavaScript, C#, SQL, and API development for Android-facing product functionality.

Axle Informatics / National Institutes of Health (NIH)

Linux Administrator and Data Processor (Contractor)

May 2024 – Aug. 2025

Baltimore, MD

- Developed Bash, Python, and MySQL scripts to automate backups, monitor file-system integrity, support data processing, and resolve system overloads in Linux-based research infrastructure.
- Deployed and managed Docker containers for web applications and authentication services supporting research computing workflows.
- Authored installation guides and system-configuration documentation adopted by multiple research labs.

National Institute on Drug Abuse (NIDA / NIH)

Postbaccalaureate Research Fellow

Aug. 2022 – May 2024

Baltimore, MD

- Engineered data-processing workflows for large-scale Reddit datasets, including text normalization, tokenization, and dictionary extraction for computational social science research.
- Optimized transformation scripts for smartphone sensor data to support integration with a digital biomarker analysis platform.
- Built an API-assisted literature-review tool using the OpenAI API and research metadata sources to support meta-analysis paper screening.

Projects

XNAT Deployment Toolkit | *Linux, Bash, Docker, research infrastructure*

GitHub

- Built deployment and operations tooling for research infrastructure, with scripts and documentation for reproducible setup, troubleshooting, and system reliability.

Paper Meta-Analyzer | *Python, OpenAI API, Zotero, PDF processing, MySQL*

GitHub

- Developed a Python research tool for literature-review workflows, combining API access, PDF/text processing, and structured metadata storage.

Pushshift Toolkit | *Python, Reddit data, MySQL, text processing*

GitHub

- Created data tooling for collecting, processing, and analyzing Reddit data used in computational social science research.

Selected Publications

Giorgi et al. “Evaluating generative AI responses to real-world drug-related questions.” *Psychiatry Research*, 2024.

Giorgi et al. “Explicit and Implicit Large Language Model Personas Generate Opinions but Fail to Replicate Deeper Perceptions and Biases.” *arXiv*, 2024.

Fried et al. “Exploring Sexualized Cannabis Use: A Linguistic Analysis of User Experiences.” Presented at IC2S2, ICWSM, and CPDD, 2024.

Technical Skills

Languages: Java, Python, Bash, R, SQL, JavaScript, C#, C, Rust, OCaml

Data/Backend: MySQL, SQLite, MariaDB, API integration, data pipelines, text processing

Tools: Git, GitHub, Docker, Linux, AWS