

## ROBERT COCKER

### Summary

Versatile technical professional pivoting into AI/ML, data engineering, and open-source security systems. Grounded in applied psychology, systems programming, and infrastructure tooling across diverse domains - ranging from automotive and construction to enterprise IT and academic research. Interested in mission-driven projects at the intersection of open-source, security, and distributed intelligence. Currently exploring contributions across AI2, OWASP, and Apache Software Foundation ecosystems.

### Core Technical Stack

Python, C, Rust, Mojo, R, SAS, SQL, MATLAB, COBOL, Pandas, Scikit-learn, TensorFlow, Git, Jupyter, UNIX and UNIX-like systems (Ubuntu, Linux, FreeBSD), IBM z/OS, SQLite, SPSS, AutoCAD, VS Code, Bash, Data Engineering, AI/ML/DL Pipelines, OS-level Scripting, Open-Source Security

### Experience

The University of Texas at Arlington - Undergraduate Researcher

Jan 2024 - May 2024

- Conducted research in I/O psychology with emphasis on identity, behavior, and data curation
- Participated in UROP UG research program with mentorship and lab experience

IBM - Mainframe Systems Administrator Intern

Jan 2022 - Dec 2022

- Managed system operations across mainframe/cloud hybrid environments
- Supported data governance and database administration for banking sector clients
- Contributed to enterprise-grade IT infrastructure under z/OS

UTA Libraries - Student Assistant

Jan 2023 - Sep 2023

- Assisted in data curation and digital archiving
- Supported library information systems and backend catalog tools

V&M General Construction - General Contractor

1998 - 2018

## ROBERT COCKER

- Oversaw CAD-based design, blueprint development, and construction management
- Applied project-based systems thinking to logistics, safety, and delivery

Enterprise Holdings Inc. - Automotive Fleet Technician

2009 - 2017

- Performed preventive diagnostics and repairs on commercial vehicles
- Adhered to compliance and quality assurance standards

### Education

BS in Data Science (Psychology concentration)

University of Texas at Arlington - GPA: 3.2 (Junior Year)

- Student organizations
- Plans for Master's and Doctoral study in AI + infrastructure security

AS in Automotive & Diesel Technology

Lincoln Tech - 4.0 GPA

Additional: Y Combinator (Startup School), Dallas College, Tarrant County College

### Selected Projects

Metastatic Cancer ML Model

<https://github.com/rcghpge/metastatic-cancer-diagnosis-prediction>

Built a classification model to predict metastatic cancer spread using clinical datasets.

SpaceX Landing Prediction

<https://github.com/rcghpge/ibm-data-science-professional-cert/tree/main/space-x-capstone>

Analyzed SpaceX telemetry and engineered features to model booster landing outcomes.

Python Data Engineering Pipeline

<https://github.com/rcghpge/ibm-data-engineering-professional-certificate/tree/main/python-project-for-de>

Packaged Python modules for ETL processes and pipeline deployment.

**Open Source Interests**

- Security scanning, malware detection, and rule-based heuristics (ClamAV, YARA)
- Data and system resilience in open-source ecosystems (FreeBSD, ZFS, WASM)
- AI research infrastructure and public-good tools (AI2, OWASP, Apache Beam)