Trent Rogers

LinkedIn | GitHub

Software engineer and systems thinker with a dual background in Cognitive Science (AI/neuroscience concentrations) and Computer Science, and 2+ years of experience developing, debugging, and modernizing robust C++ and Python systems for high-stakes environments (FAA). Experience with automation, data-driven problem-solving, and rapid adaptation to complex technical systems. Passionate about understanding how complex/intelligent information systems work internally.

EDUCATION

Graduate Certificate in Data Science (In Progress)

Harvard Extension School | 2024–Present

- Foundations of Large Language Models (CSCI E-115) – Spring 2026
- Foundations of Data Science and Engineering (CSCI E-101) – Grade: A
- Mathematical Statistics (MATH E-156) – Grade: A

B.S. in Cognitive Science and Computer Science

University of Texas at Dallas | 2022 | GPA: 3.50

- Academic Excellence Scholarship recipient

A.S. in Biology

Oklahoma City Community College | 2017 | GPA: 3.78

SKILLS

Python (Pandas, NumPy) | C++ | AI-Assisted Development | Docker | SQL | EDA | Bash Scripting | Linux (RHEL/Ubuntu) | PowerShell | Git/Bitbucket | Jira (SAFe Agile) | Technical Documentation

EXPERIENCE

JMA Solutions

Software Engineer (FAA contract) | December 2023 - Present

- Active U.S. Secret security clearance
- Engineered automated cybersecurity hardening solutions with granular Python and PowerShell scripts, ensuring compliance while preserving critical functionality in operational infrastructure
- Performed data analysis with Python/Pandas to identify statistical baselines from historical sensor data, to establish robust equipment fault thresholds while reducing nuisance alerts
- Led infrastructure modernization project to containerize legacy C++ monitoring application into Docker containers on modern RHEL server
- Analyzed and debugged complex virtualization, networking, and inter-process communication issues across environments (Windows, RHEL, Docker), including custom packet capture and regex-based parsing of proprietary network traffic
- Authored comprehensive technical documentation and test procedures/reports for safety-critical systems, ensuring compliance with engineering standards and traceability requirements
- Worked within SAFe Agile framework using Jira and Git/Bitbucket, regularly presenting project accomplishments to diverse stakeholders (DHS, DoD, FAA)

Provalus

SOC (Security Operations Center) Analyst | June 2023 – September 2023

- Quickly mastered an array of tools such as Splunk, ServiceNow, Microsoft Defender, Azure Sentinel, ProofPoint, and DomainTools within a compressed training schedule, allowing for swift integration into the SOC team.
- Navigated log data via Splunk queries to identify anomalous activities, such as analyzing large data uploads via firewall logs to identify the source and other details.
- Rapidly adapted to the ServiceNow ticketing system and rigorously documented detailed information relevant to each investigation, ensuring that the specialized teams we collaborated with had all the information they needed in a clear and concise format.
- Meticulously investigated, documented, and resolved or escalated over 350 ServiceNow cybersecurity incident tickets, in addition to evaluating, summarizing and classifying hundreds of user-reported emails.

Salesforce Developer Training Program | February 2023 – June 2023

- Successfully completed training program, quickly earning Salesforce Administrator certification with no prior experience.

University of Oklahoma Health Sciences Center

Undergraduate Researcher | May 2017 - July 2017

- Used western blots to isolate proteins involved in diabetic retinopathy from mouse retinas and recorded the data, as well as cared for the mice