Brandon Bain

(781) 999-4121 - brandondbain@gmail.com - in/Brandon-bain/ - GitHub

EDUCATION

Rochester Institute of Technology | Rochester, NY

May 2025

B.S. Computing and Information Technologies | Database Applications & Enterprise Administration

Major GPA: 3.6

Minor: Free Culture and Free and Open Source Computing

Clubs: RIT Security, Taekwondo Club, Astronomy Club, Caring Hearts for RIT Cats

RELEVANT EXPERIENCE

Enterprise Risk Team, Ultimate Kronos Group (UKG)

January 2024 - April 2024

Enterprise Risk Intern

Lowell, MA

Conducted the coordination and execution of GRC and ERM initiatives, leading ISO and SOC audit preparations.

Collaborated with various teams to enhance the risk management framework, conducted risk assessments alongside the Risk Assurance team, and aided the Resiliency Team in reporting the business impact assessments of system downtimes caused by natural disaster events.

Information Security Team, Labster

June 2023 - August 2023

Cybersecurity & IT Intern

Somerville, MA

- Developed and implemented Labster's global privacy compliance program and security framework including drafting data privacy, security policies, and conducting IT user access audits.
- Managed live system access, contributing to safeguarding the production environment and supporting the maintenance of a decentralized network infrastructure.
- Conducted Intruder Vulnerability scans using NinjaOne and performed SSL certificate scans to enhance Labster's security monitoring and infrastructure safety.

Advanced SATCOM Sys & Ops. MIT Lincoln Laboratory

December 2019 - June 2020

Co-op Assistant

Lexington, MA

- Collaborated across the organization to successfully develop and uphold systems through comprehensive analysis, engineering, manufacturing, calibrating, and testing.
- Held and sustained an active Department of Defense Secret clearance.

Projects & Labs

Optimizing Police Resource Deployment Using Data Mining

December 2023

- Led and executed a data mining exploratory project demonstrating data evaluation, exploration, pre-processing, and generating conclusions by analyzing 39,812 data points from 1,074 records of real crime reports from a Rochester Police Department 60-day crime dataset.
- Applied data mining techniques (ZeroR, OneR, J48, and KNN) to uncover crime patterns, achieving a significant model performance as KNN predicted crime with 80.25% accuracy. The analysis recommended strategic adjustments in police presence and patrol scheduling, targeting repeat areas and peak times for criminal activity.

Application Performance Monitoring

November 2023

- Collaboratively developed and executed a comprehensive Bash script for Application Performance Monitoring (APM) on pre-compiled C executables, simulating real-world computing processes.
- APM Bash script collects, analyzes, and reports crucial system and process performance metrics at 5-second intervals, including CPU/memory utilization, network bandwidth (RX/TX rates), and disk activity. The script leverages 'ps', 'ifstat', 'iostat', and 'df' for data collection, streamlining output into CSV files for precise analysis of individual processes and system-wide performance, guaranteeing thorough evaluation.

PHP & Database Modular Site

- Developed an interactive guide for Lake Winnipesaukee, showcasing advanced web development techniques with HTML5, CSS3, JavaScript, and PHP for a highly responsive, database-driven website.
- Utilized MvSQL for efficient database-driven content management and PHP for modular page generation. emphasizing design coherence, ease of navigation, and optimal content organization. Employed form data validation, sanitization, and responsive design principles without reliance on external libraries, demonstrating high proficiency in creating accessible, user-centric web applications that adhere to web standards.

SKILLS

Operating Systems: Windows 10 & 11, Mac OS X, Rocky Linux, Kali Linux, Red Hat Enterprise Linux, Ubuntu Linux Languages: Python, Java, Bash, C++, MySQL, PHP (basic), HTML, CSS, JavaScript

Development Software: VS Code, PyCharm, Docker, Git, GitHub, GitLab

Software: NinjaOne, Drata, Jira, Weka, Minitab, Wireshark, Nmap, BurpSuite, Metasploit, VMWare, Oracle Virtual Box, Amazon AWS, Microsoft Azure

Awards and Achievements

- SkillsUSA Gold & Silver Medalist in Additive Manufacturing 2018 & 2019
- Dean's List: Spring 2021, Spring 2023, Fall 2023