

Brittney Leigh Banning

SYSTEMS SOFTWARE • LINUX • DISTRIBUTED SYSTEMS

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EDUCATION

Georgia Southwestern State University Americus, GA 2026–Present

- M.S. in Computer Science (in progress); graduate focus in operating systems, distributed computing, networking, and information security.
- Coursework: Operating Systems, Distributed Operating Systems, Information Security, Data Structures & Algorithms, Database Design, Distributed Web Applications, Human–Computer Interaction & Interface Design, Internet Architecture & Protocols.
- Additional study: Harvard CS50; Google Foundations of Cybersecurity.

TECHNICAL EXPERIENCE

Bit Foundry Labs Independent Software Studio 2026–Present

- Build and iterate on systems-adjacent developer tools, learning software, and cross-platform applications; own implementation, testing, documentation, and product direction.
- Created Spaceman Terminal Themes for Kali Linux Konsole, packaging an Event Horizon color scheme, installer, setup instructions, and initial release.

Graduate Coursework Operating Systems & Distributed Systems 2026–Present

- Studied process/thread lifecycle, synchronization, scheduling, virtual memory, IPC, system architecture, distributed coordination, replication, and failure models.
- Built a three-node Raft key-value store with leader election, randomized election timers, heartbeats, replicated logs, client PUT operations, and simulated network isolation.

Systems / Security Labs Linux, Networking & Application Security 2026

- Used Linux and Kali Linux for command-line administration, process inspection, permissions, networking, logs, and system troubleshooting.
- Analyzed network and application behavior with Wireshark, Burp Suite, browser tools, Android Debug Bridge, emulators, SQLite, and intentionally vulnerable applications.

SOFTWARE PROJECTS

Mindful Moments | *Flutter, Dart, cross-platform mobile*

- Developing a cross-platform mindfulness app with a daily activity flow, optional reflections, journal history, local saving, and date navigation.
- Refactored Flutter code into separate screens, widgets, and testable validation logic; added tests for saved state, completion tracking, save/load recovery, unsaved notes, and guest/account data boundaries.

Neural Trace | *Bash, Linux, jq, networking* github.com/brittneyleighb/neural-trace

- Built an interactive Linux CLI that inspects processes, network activity, open ports, uptime, firewall state, and other OS signals, then organizes them into actionable diagnostics.

Mini Port Scanner | *Python, TCP sockets, threading* github.com/brittneyleighb/mini-port-scanner

- Implemented a multithreaded TCP scanner with Python sockets to identify open ports and likely services while exploring connection behavior beneath tools such as Nmap.

Simplified Raft Distributed Key–Value Store | *Java, distributed systems*

- Implemented leader election, heartbeat messaging, log replication, state-machine application, and failure simulation to study consensus and recovery under degraded network conditions.

Win Sentinel | *Bash, PowerShell, Windows systems* github.com/brittneyleighb/win-sentinel

- Created a read-only diagnostics tool for CPU-heavy processes, memory, disk, startup programs, listening ports, services, and recent Windows system errors.

SKILLS

Languages: Java, Dart, Python, Bash, C fundamentals, JavaScript, SQL

Frameworks & Tools: Flutter, Git, GitHub, Docker, Wireshark, Burp Suite, ADB

Systems: Linux, PowerShell, processes/threads, sockets, TCP/IP, concurrency, synchronization, virtual memory