Riddhi Banerjee

813-503-2452 | www.riddhibanerjee.com | www.linkedin.com/in/riddhi-banerjee | github.com/riddhibanerjee5

Education

University of Florida — Gainesville, FL
Master of Science in Computer Science – 3.84 GPA — Aug. 2023 – May. 2025

Experience

Build and Release Automation Engineering Intern — Jun. 2023 – Aug. 2023
Malwarebytes – Build and Release Team — Clearwater, FL
- Developed a bash script to create and share 80 new Amazon Machine Images; removed manual configuration time and sped up the Jenkins migration process by 40%
- Orchestrated the launch of EC2 instances with Terraform; utilized GitHub Actions to ensure safe release into production
- Modified and attached new instance profile to instances; reduced infrastructure build time for new AWS account by 25%

Undergraduate Research Assistant — Aug. 2022 – May. 2023
McKnight Brain Institute — Gainesville, FL
- Contributed to a C++ behavior mapping project owned by a Ph.D. student (QtGui and OpenCV libraries) that allows user to highlight a target in a region of interest, and tracks the target for the duration of the video
- Reconfigured UI layout and added an additional page to upgrade usability; reduced average time spent on the platform by 30%

Software Engineering Intern — May 2022 – Aug. 2022
Malwarebytes – Cloud Workload Security Team — Clearwater, FL
- Developed Golang unit and integration tests to reach 85-90% code coverage for microservices within a cloud storage scanning service; refined test efficiency by 20% and improved team productivity by 35%
- Created and deployed a custom script of Linux commands on minikube to measure the detection of Falco security rules against a cloud detection and response (CDR) service; presented findings to team and saved 10+ hours on identifying threats
- Pinpointed two cases of command detection failure by the Falco threat engine, enabling a more comprehensive threat detection and response plan
- Launched an API in Golang using gRPC to retrieve the logs of threat detections; increased speed of retrieval by 40%

Undergraduate Peer Instructor — Aug. 2021 – Dec. 2021
University of Florida – ECE Department — Gainesville, FL
- Instructed and guided 12+ CpE students in Digital Logic and Computer Systems with hands-on lab sessions and lectures; achieved 100% positive feedback from students
- Delivered 20+ hours of high-quality lectures on Quartus software and hardware systems design using SSI/MSI elements, sequential logic, VHDL, FFs and counters, RAM/ROM, state machines, and CPU
- Led office hours and additional study sessions outside of class – students in section achieved on average 12 points higher than the class on the midterm and final exam

Projects

FanSync | *Flutter, Java Spring Boot* — Nov. 2023 – Present
- Developing an iOS and Android app that allows fans of a team to coordinate chants at sporting events through a fan verification system that utilizes proximity to stadium, certification of home team support, and a voting system that queues the top chants.

StrumFinder | *Python* — Oct. 2022 – Apr. 2023
- Teamed with two students to create a web-app that displays guitar strum direction for user-selected songs (https://github.com/riddhibanerjee5/StrumFinder)
- Interfaced with external circuit that acts as a metronome to play a song-specific BPM; strengthened user experience by 20%
- Spearheaded the design and development of an intuitive GUI that displays a sliding pattern of arrows, enabling users to play the song and view the strumming pattern simultaneously; boosted overall efficiency and experience by 45%
- Co-created an algorithm that analyzes song file and identifies the pattern of strums that are 95% accurate with timing; optimized system performance and reduced frame rate issues by 40%

Technical Skills

Languages: Java, Go, C/C++, Python, JavaScript, VHDL, AVR Assembly, HTML/CSS
Frameworks and Libraries: React, gRPC, Gin, Express, Dialogflow, Go-Resty, Postman
Developer Tools: Git, Docker, Kubernetes, Amazon Web Services, MongoDB, Quartus, Terraform, Jenkins, GitHub Actions
Courses: Data Structures & Algorithms, Operating Systems, Microprocessor Applications, Distributed OS Principles