

Zohaib Rauf

(919) 583-3821 • <https://github.com/ZabeRauf> • rauf.zabe@gmail.com • <https://www.linkedin.com/in/zohaib-z-rauf/>

TECHNICAL SKILLS

Languages: C#, Python, VB.Net, C++, C, Bash, SQL, Swift, Java, Javascript, HTML5/CSS3, SQL.

Operating Systems: Windows OS, Mac OS, iOS, WSL, OpenSUSE, Ubuntu, Kali Linux.

Tools and Techniques: .NET 5-7, Debugging, Visual Studio 2019/2022, Xcode, Azure DevOps (ADO), Git Bash, Kanban, Jupyter Notebook, Keras, TensorFlow, Arduino, Drupal, VMWare, MatLab, MySQL, Jira, BitBucket, GitLab.

WORK EXPERIENCE

Space Weather Prediction Center - NOAA: Software Engineer

March 2022 - Present

- Researched solar flares and alerts broadcasting to define requirements and develop next generation radiation monitoring tools utilized by the NASA Artemis and Blue Origin programs.
- Designed and developed a GUI web application with a modern, intuitive, and highly responsive design with self-healing properties as a part of a digital transformation initiative.
- Collaborated with cross-functional teams and end users to produce a system for aurora image processing using python and drupal.
- Migrated legacy configuration data and alarm categories into a SQL database to ensure data quality, sustainability, and maintainability.
- Led a team to create a new charting feature for space weather research with a successful launch delivered early and under budget.
- Developed features and testing facilities from the ground up for backend systems utilizing Python/Flask with C#.
- Performed end of life support and decommissioning of legacy radiation monitoring system.
- Became the point of contact on multiple legacy systems by learning on the job how to release, interface, and maintain each product.
- Performed emergency maintenance for forecasting to deliver high priority bug fixes and features to meet tight SLA requirements.
- Wrote documentation to enable quick on-boarding to legacy forecasting software.

Grover Gaming: Junior Software Developer

September 2020 - February 2022

- Collaborated with hardware operations team to design and build a board support package to link bill validator and ticket printer to core system to support a layered architecture which lead to reduced maintenance time and cost.
- Designed hardware services to be modular and allow the replacement of hardware without having to take down the system saving time and allowing quick restoration and quick start-up if need be.
- Implemented logging and troubleshooting logic to support embedded systems development make quality assurance testing easier.
- Improved security features relating authentication for operations staff when setting up new machines in the field.
- Interacted with bill validator protocol service to develop a solution to bill fishing, reducing income loss per machine by 80%.
- Refactored legacy store management system response time from 5 minutes to half a second by improving database interactions and reducing the amount of connections made.

EDUCATION

East Carolina University

Bachelor of Science in Computer Science

August 2014 - July 2020

SELF-LEAD PROJECTS

Flight Controller: C/C++

- Developed a flight controller using an Arduino device, a gyroscope, and electronic speed controllers to assist in operating the drone and alter parameters during flight.

AstroPy - Asteroid Map: Python

- Developed a basic solar system map that tracks near-earth safe, near-earth potential hazard, and dwarf planet/belt bodies and displays info on those asteroids in a list.