

Shah Nafis Rafique

📍 Morrisville, North Carolina, United States ✉ nafis.shah@gmail.com ☎ (919) 351 8184 🌐 <https://www.linkedin.com/in/shahnafis> 🌐 <https://shahnafisrafique.com/>

SUMMARY

Professional Software Engineer with 3 years of experience maintaining a Secret level federal clearance. Bachelor's degree from the University of North Carolina at Greensboro.

EXPERIENCE

Software Engineer

Peraton

February 2021 - Present, Chantilly, VA

- Transformed, validated, and protected network communications over various protocols, including HTTP, TCP, UDP, SFTP, and JMS across various security domains.
- Improved existing legacy Python scripts, developed security filters in Lua, constructed Java integration tests with Citrus all in an Agile development environment.
- Network orchestration supported by Docker, Kubernetes via Rancher, and Helm all running on Red Hat Linux.
- Lead new development standards by promoting unit tests and large codebase refactors to better meet client demands.

Associate Software Engineer

Northrop Grumman Defense Systems

August 2020 - February 2021, King George, VA

- Developed Combat System Simulations in C++, CMake, MFC, Boost, and Lua in an Agile development environment.
- Renovated existing GUI to modernize and increase user-friendliness using WxWidgets to support Navy training.
- High-performance desktop application powered by distributed computing to allow processing of over one million combat units.

Fullstack Developer

University of North Carolina at Greensboro

August 2019 - August 2020, Greensboro, NC

- Hurricane image dataset labeling web application implemented in MongoDB, Express.js, React.js, and Node.js utilizing the Next.js framework along with Jest.js for unit testing.
- Setup Continuous Integration and Deployment (CI/CD) leveraging GitHub Actions to deploy to Linux server on push.
- Improved productivity for labelers using the dashboard and enabled labeling of one terabyte of images across 6 datasets over half a year.
- Measured data quality by constructing Convolutional Neural Network to better understand the necessary sample size to create an accurate model. This led to a technical recommendation to collect over 1000 more images based on class imbalance.

Frontend Developer

Supplemental Software

June 2018 - June 2019, Greensboro, NC

- Translated designs into a functional dashboard for water pump displays. Utilized ES6 JavaScript, HTML5, CSS3, jQuery and Bootstrap 4.
- Integrated multiple RESTful APIs specified from back-end documentation.
- Realtime dashboard consumed and transformed API responses over AJAX at a rate of over 1000 data points a minute.

EDUCATION

Bachelor of Science in Computer Science with Concentration in Data Science and Big Data

Minor in Mathematics • University of North Carolina at Greensboro • Greensboro, NC • 2020 • 3.6

SKILLS

Languages: JavaScript, TypeScript, Lua, C++, Python, Java, HTML / HTML5, CSS / CSS3, Bash, JSON

Technologies: Node.js, MongoDB, Git, GitHub, Google Cloud Platform, Amazon AWS, Microsoft Azure, CI/CD, Apache Camel, CMake, VS Code, Visual Studio, HashiCorp Vault

Operating Systems: Windows, Ubuntu, Linux / Unix, Red Hat Enterprise

Libraries / Frameworks: React, React Native, Express.js, Next.js, Jest, Citrus, Microsoft Foundation Class (MFC), WxWidgets, Pandas