

Motivated individual with in-depth knowledge of back-end and Android Software Development. Seeking an Entry Software Engineering position at a dynamic company that allows me to maximize my Software Developing skills for the organization, find creative solutions to complex problems, while continuously learning.

## EDUCATION

### Virginia Tech

*Master of Engineering – Computer Science | (exp. graduation: Dec 2023)*  
Concentration - Software Development

### Radford University

*Bachelor of Science Geospatial Science | (graduation: June 2019)*  
Concentration - Geoinformatics  
GEOINT Certificate  
Dean's List (Fall 2018-Spring 2019)

## PROJECTS

### Covid Database

*Intermediate Data Structures & Algorithms, Virginia Tech (Fall 2022).*

- Worked on a team of 3 students to develop a COVID database that could store and parse a given dataset, and have the functionality to filter between location and race.
- My task was to develop the back-end database storage system, and handle the functionality of parsing the dataset and filtering the data.

## PROFESSIONAL EXPERIENCE

### Graduate Assistant

*Virginia Tech Emergency Management (Aug 2021 – present)*

- Trained a ML Algorithm to detect landcover types of self-collected data for the purpose of damage assessment through change detection. Wrote a python script to completely automate the entire workflow.
- Wrote a detailed SOP on the Damage Assessment Workflow for use after I graduate.
- Leveraged Veoci and multiple internal/ external Rest API to constantly feed and analyze data from different datasets that are useful to the mission of Emergency Management.
- Helped update the UI of our department's 'Hokie Ready App'

### Engineering GIS Specialist

*Western Virginia Water Authority (Aug 2019 – Aug 2021)*

- Leveraged Infonet, ArcGIS, and Excel to manage assets, analyze data, while performing Spatial and Hydraulic modeling.
- Wrote a Ruby tool to automate a GPS point workflow that originally took 4 hours to manually complete.
- Wrote 160+ SQL tools to perform over 2 hundred thousand updates on assets.
- Fostered everything under Fire Flow jurisdiction, updated discrepancies in existing methodology; researched Fire Flow Testing and Analysis, and wrote a detailed SOP.
- Led a team where we designed, processed, and reported 180 fire flow tests.
- Performed multiple Hydraulic models for water/ wastewater.

## LANGUAGE EXPERIENCE SKILLS

(Adv.) Java (Interm.) Kotlin, Python, SQL (Basic) C++, HTML, JS, Ruby, R

## SOFTWARE ENGINEERING SKILLS

(Interm.) Design Patterns, OOP, Scrum, Software Life Cycle, Git, Debugging, Testing