



# Kirsten Phillips

## Software Engineer

k-h-phillips.github.io   
(434) 917-0499  
kirstenphillips210@gmail.com

## Work Experience

### Software Engineer

*Top Secret/SCI with Polygraph*

IT Availability LLC. – Vienna, VA  
September 2022 – ongoing

#### Python automated data collection and processing applications

Python Playwright JSON MongoDB REDIS Bash Scripting Powershell Azure GitLab Linux Windows

- Implemented Python applications to accomplish automated data collection via APIs and other collection strategies
- Analyzed and transformed raw and unstructured data into semi-structured JSON data and collaborated with a full stack team that used ETL pipelines to extract entity relationships and display them to end users
- Designed and implemented MongoDB and REDIS databases to store scheduling information and collection metadata, successfully reducing duplicate data collection and storage costs by 50% for US-Government clients
- Developed in Linux and Windows operating systems and used bash and powershell scripting for automated tasks
- Contributed to standard operating procedures (SOPs) for code review, documentation, and codebase management

#### Front-end web application plugin

JavaScript HTML CSS Bootstrap TypeScript Node.js React AWS S3 EC2 Lambda GitHub Java Selenium

- Completed API and GUI modernization and refactoring efforts to increase efficiency, stability, and usability of a cross-platform plugin that automates a tedious and error prone process for US-Government host application users
- Collaborated on a simple, easy to adopt web API for integrating developers of different backgrounds and skill levels
- Conducted UI design reviews with internal and external parties to improve the user experience
- Collaborated on the front end to deliver a better user experience, using Bootstrap controls and conforming to strict website accessibility standards on par with the W3C standards
- Delivered a modernized release for the plugin with minimal defects in an agile SDLC on a 6 month timeline
- Led the development of automated UI testing suites which led to the discovery and remediation of bugs
- Supported production systems by answering requests for integration assistance

### Software Developer

G3 Technologies Inc. – Ashburn, VA  
August 2021 – September 2022

#### Full stack data driven web applications

JavaScript HTML CSS Bootstrap C# ASP.NET Elasticsearch NoSQL Kafka Docker Kubernetes Ansible  
Jenkins CI/CD MariaDB gRPC Python Selenium

- Used acquired domain knowledge in cellular technologies to perform ASP.NET (C#) maintenance development and Python automated testing for a full stack data driven web application
- Wrote complex Elasticsearch queries to test backend performance and algorithm accuracy
- Designed and developed a full stack application to ingest, process, load, and display audio data to end users
- Conducted in depth UI design reviews with UI experts
- Wrote custom ASP.NET (C#) server controls to meet specific UI and server requirements
- Designed and normalized a SQL database using MariaDB to store core application data
- Participated in a culture of programming and documentation standards, in-depth code reviews, and extensive testing

## Side Projects

#### k-h-phillips.github.io *(ongoing)*

- Web development project built with React, Next.js, NextUI, and Tailwind CSS & deployed with GitHub pages
- Created to offer more information about me, display my resume, and showcase some web design skills

#### Codecademy Full-Stack Engineer Professional Certification

*(completed Sept. 2024)*

- 51 courses and more than 150 hours of coursework to hone software engineering skills and learn new technologies

## Education

### Bachelors of Science in Computer Science

3.88 GPA

University of Virginia School of Engineering and Applied Sciences

- Software Development Methods, Program & Data Representation, Advanced Software Development, Computer Architecture, Algorithms, Operating Systems, Compilers, Programming Languages for Web Applications, Database Systems