# Paul Nakonieczny

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#### **Experience**

**Software Engineer** – Assured Information Security | Rome, NY

March 2019 - Present

Python, C++, Django, Flask, Postgres, MongoDB, Nginx, RIOT.JS, Bootstrap

- Designed a video streaming and sharing web application in two days to address customer needs in response to COVID-19 for a private web application. Developed both the back-end and front-end.
- Wrote unit tests using test-driven-development to verify correct code execution and validate user input. Increased the percentage of tested code from 0% to 90%.
- Collaborated with the customer to identify design goals for a website rebuild, and achieved a site performance increase of over 300% as measured by Google's "Pagespeed Insights".
- Led and mentored a group of six interns using Scrum for tasking and management. Discussed and tackled leadership and technological problems.
- Managed a virtual network with over 500 virtual machines, 50 routers, and 25 autonomous systems.

 $\textbf{Intern} - \textbf{Assured Information Security} \mid \textbf{Rome}, \, \textbf{NY}$ 

October 2018 - December 2018

Python, Postgres, Bash

- Increased UI interaction speeds in a custom Python terminal interface by reducing algorithmic complexity and using asynchronous operations.
- Documented the codebase using the Sphinx documentation tool and Google's Python Style Guide.

Intern – Air Force Research Laboratory| Rome, NY

May 2018 - August 2018

C++, Python, PyQt, Apache, MySQL

- Developed a desktop application to display live network information.
- Engineered software to infiltrate target computers. Developed a command-and-control server to issue commands to target computers.
- Designed and reinforced a network infrastructure with services such as HTTP/HTTPS, Telnet, IRC, SSH, FTP, DNS, Gitlab, VPN, and a VyOS router on a virtual network with server virtualization software.
- Promoted to deputy commander of a 15 person team.

## **Projects**

## **Credits Cryptocurrency**

github.com/Sqt-Forge/Credits

JavaScript, Node.js, Travis-CI, Coveralls

• Designed and implemented a minimal blockchain and cryptocurrency. Managed Continuous Integration/Continuous Deployment with Travis-CI, Coveralls, and test driven development.

### **Coursera Machine Learning**

github.com/Sgt-Forge/Coursera-ML-Python

Octave, Python, Matplotlib

• Earning a certificate in machine learning from Coursera. Building neural networks, logistic regression models, and support vector machines in Octave. Manually implementing classwork in Python as a personal project.

## **Technical Skills & Certifications**

Languages: Python, C++, JavaScript, C, Java, Bash, HTML5, CSS3

Software Skills: Git, Node.js, Flask, Django, Linux, PostgreSQL, Docker, Travis CI, Coveralls, Octave, MongoDB

**Security Clearance:** Top Secret (March 2020-Present)

### **Education**

Binghamton University, Binghamton, NY

September 2015 - December 2018

B.S. Computer Science

3.37 GPA