

# Wiktor Kaczor

**Mobile Number:** 07936271953

**Email:** wiktoraleksanderkaczor@gmail.com

**Website:** <https://wiktorkaczor.com>

**LinkedIn:** <https://www.linkedin.com/in/wiktorkaczor>

## Home Address:

Flat 14, 9 Muirhouse Crescent

Edinburgh

EH4 4QF

## Education

### Undergraduate Study at Edinburgh Napier University (2019 to 2021):

- BEng (Hons) Cybersecurity and Forensics (3<sup>rd</sup> Year Entry) with First Class Honours [2019 to 2021]

### Higher Education at Edinburgh College (2016 to 2019):

- Higher National Diploma Computing: Networking - Grade A (SQCF Level 8) [2017 to 2019]
- National Certificate Computing: Technical Support - (SQCF Level 6) [2016 to 2017]

### Additional Certifications:

- Splunk Core Certified Power User [Certified 2022]  
<https://www.credly.com/badges/9316b645-80f6-4db7-bb0c-4fbf985d1a2d>
- Splunk Core Certified User [Certified 2021]  
<https://www.credly.com/badges/01d7b394-831b-42cf-8d89-f0c8eae8abb>
- MTA (Microsoft Technology Associate): Windows Operating System Fundamentals [Certified 2017]  
<https://www.youracclaim.com/badges/754731c9-fdf1-461a-b0e5-b658b1839778>

## Work Experience

### Software Developer

- Adarma, United Kingdom
- May 2022 to Present

### Overview:

My job involves utilizing various AWS-oriented computing, storage, and observability systems with a specialization in server-less lambda and container based architecture. Utilizing infrastructure-as-code and containerization tooling such as Terraform and Docker. PyTest industry-standard testing framework usage plus in-house extensions for interfacing with server-less architecture. Finally, security event investigation enrichment tooling, both vendor provided and written in-house.

**Responsibilities:**

- Agile-based meetings discussing and working with cross-functional teams to implement business requirements
- Platform serviceability improvements, mainly credential asset health validation and related automated support issue creation
- Documenting service up-time conditions and failure scenario cases for determining service level agreement fulfillment
- AWS service integration and usage, particularly lambda compute, object storage, low-latency caching, document and relational databases with inclusions cloud-based logging, and metric monitoring
- Utilizing containerization technology for Python-based AWS Lambda services deployment and local testing
- In-house testing migration to industry-standard framework with test profiling and debugging features
- Troubleshooting and debugging using various monitoring platforms, mainly log search and tracing based
- New security enrichment functionality based on historical event data to reduce duplication of effort
- Security posture improvements with cross-site script stripping and user input validation
- CI/CD code quality assurance and schema update pipelines
- Minor assorted front-end improvements and fixes

**SOC Analyst**

- Adarma, United Kingdom
- August 2021 to May 2022

**Responsibilities:**

- Monitoring clients' IT infrastructures for threats
- Triage, investigate and escalate security incidents
- Conducting monitoring for new security rule development
- Hunting for the newest Indicators of Compromise (IoC) within client estates
- Assisting with response process development
- Verifying security event detection with tools and databases to confirm reputation
- Updating thresholds, whitelists and threat lists for new and existing security rules

## Student

- Edinburgh Napier University, United Kingdom
- August 2019 to June 2021

## Responsibilities:

- Developing a dissertation project using existing photogrammetry solutions for image tracking purposes
- Analyzing existing source code for vulnerabilities using secure software development practices
- Collaborating with a team on web technologies group project
- Analyzing file and operating system artifacts for forensic evidence
- Python scripting for network analysis
- Basic network server penetration testing
- Executing and protecting against attacks in an IoT network simulator

## References

- Adarma available upon request
- Dr Sean McKeown (Edinburgh Napier University) - S.McKeown@napier.ac.uk

## Projects

### **Distributed storage, compute and database with ephemeral cluster (WIP)**

Abstracted multiple-access storage with various backends, auto-discovering and bootstrapping hosts forming consensus:

- Ephemeral, master-less and distributed architecture with consensus conflict resolution
- Extensible framework for additional storage implementations and wrappers
- Multi-paradigm distributed database services and compute providers
- File-system in Userspace (FUSE) storage mounting with cluster-level multiple-access
- Network auto-discovery service configuration and bootstrapping
- No external service dependencies

### **Neural Network from Scratch using Python**

A multi-layer perceptron artificial neural network implementation in Python from scratch:

- Object-oriented programming model
- Extensible design for activation functions with multiple already provided
- Model saving and loading capabilities
- OpenCV for retrieving camera data
- Xavier weight initialization function
- Gradient descent implementation
- Abstraction with wrapper functions

## **Network Packet Capture Analysis using Python**

Python script to analyze a network packet capture:

- 'dpkt' library to parse network packet data
- JSON-based initial program configuration
- Geographical data querying based on IP addresses
- Network data visualization using 'matplotlib' and 'networkx'
- Regex to filter for relevant data
- KML file creation using the geographical data
- Packet type, length, and count analysis
- Program structure visualization using 'Pyan'

## **Rota and Holiday Scheduling Web Application using NodeJS (Group Project)**

A web application for SMEs to manage their shift and holiday assignments using NodeJS containing:

- Employee rota or holiday request and assignment functionality
- SQLite database to store employee account data
- Separate dashboard for employees and administrators
- Visualization of employee timetable using a Gantt chart
- Bcrypt for hashing and salting passwords
- Form input validation and escaping
- HTTPS for data entry encryption
- Role-Based Access Control
- Data API for schedule retrieval