

Python Functions and Libraries for Cybersecurity

Uses of Python in Cybersecurity



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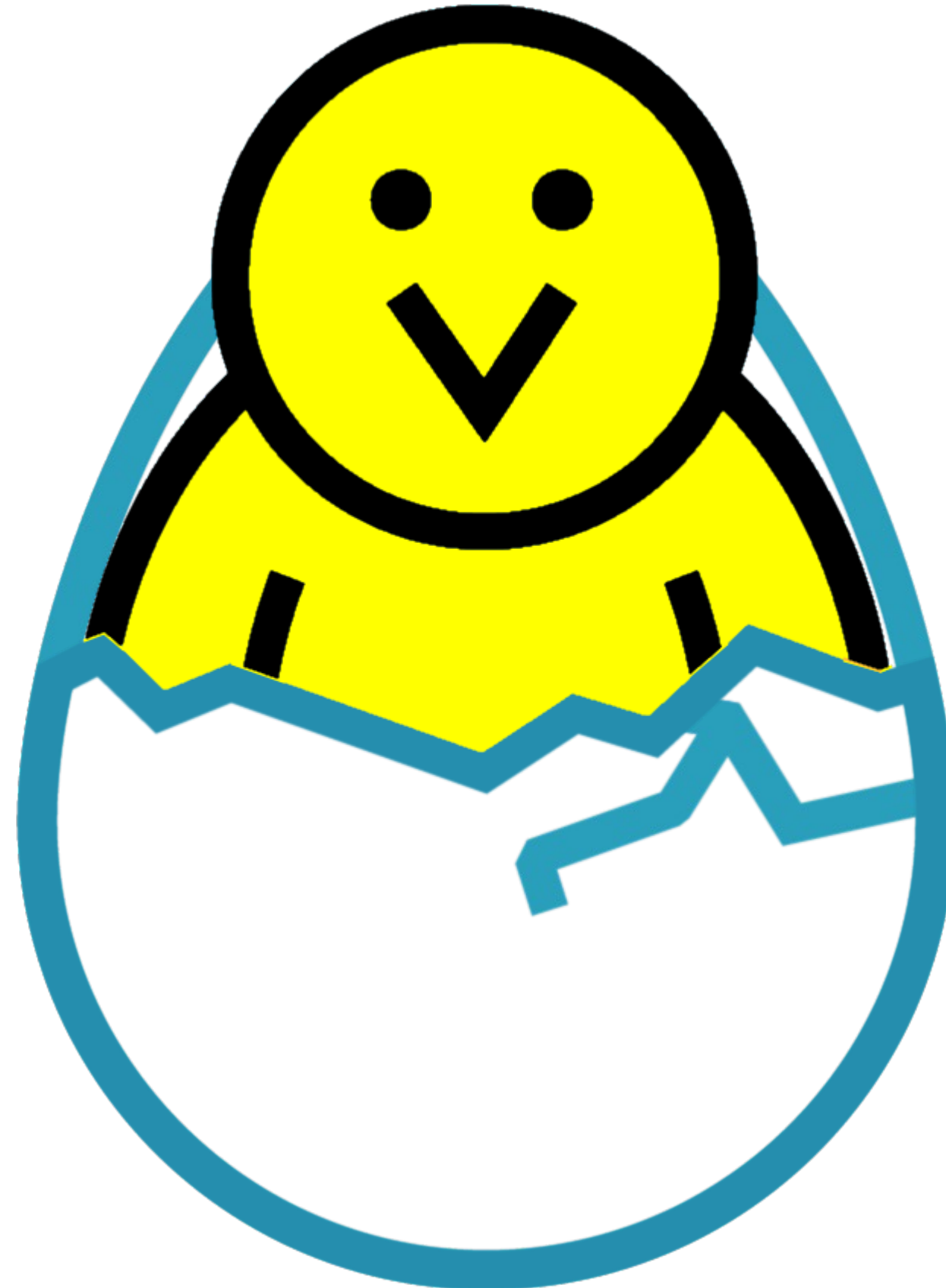


Why Python is Important to Cybersecurity Teams



Why Python?

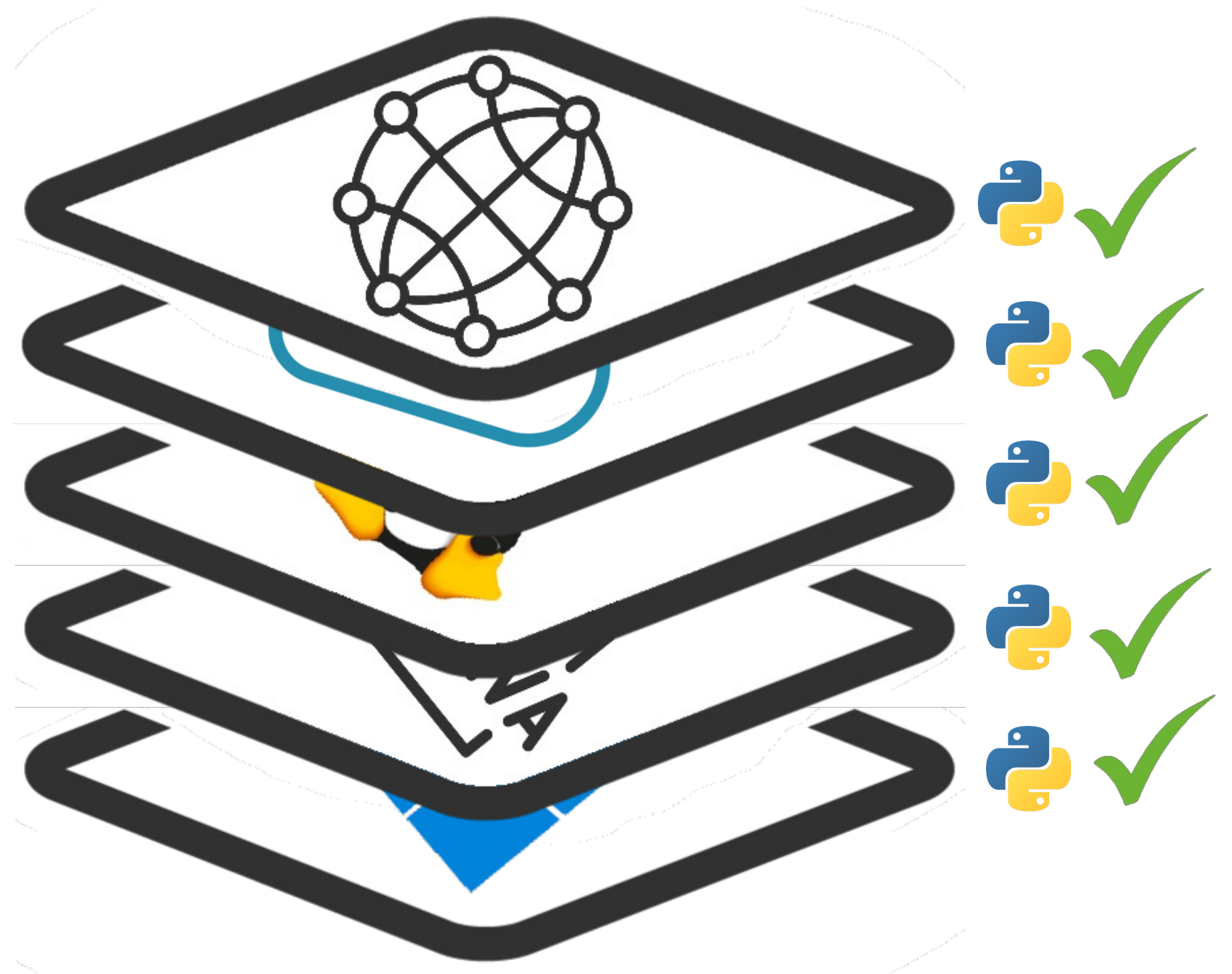
Powerful Yet Easy to Learn



Why Python?

Powerful Yet Easy to Learn

Multi-Platform

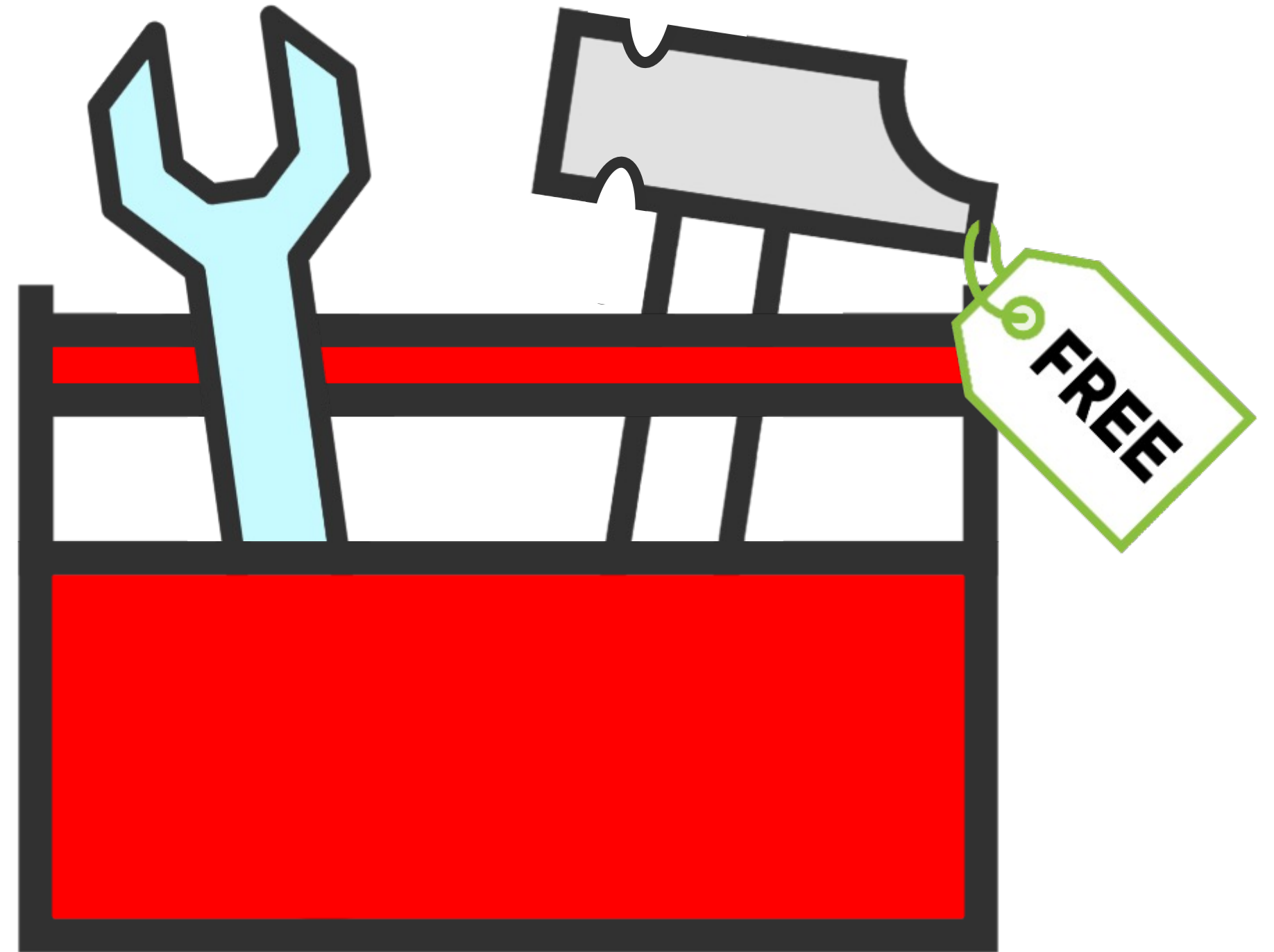


Why Python?

Powerful Yet Easy to Learn

Multi-Platform

Open Source & Free



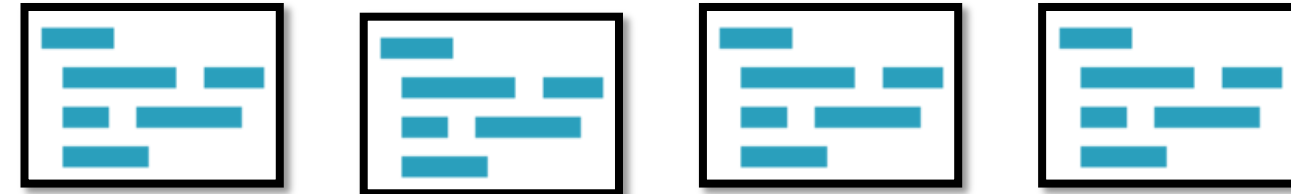
Why Python?

Powerful Yet Easy to Learn

Multi-Platform

Open Source & Free

Rich Set of Libraries



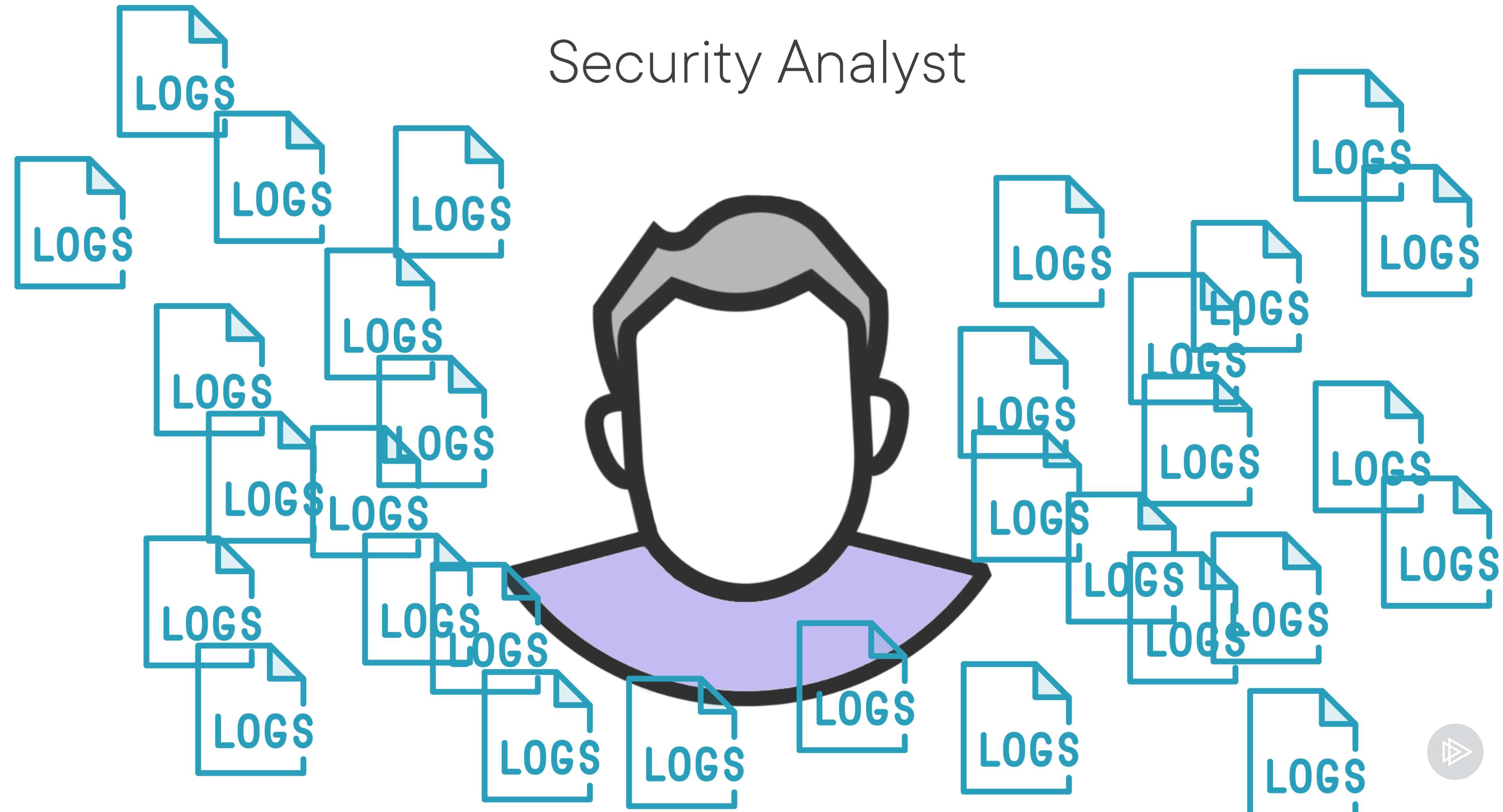
Up Next: Common Uses of Python in Cybersecurity



Common Uses of Python in Cybersecurity



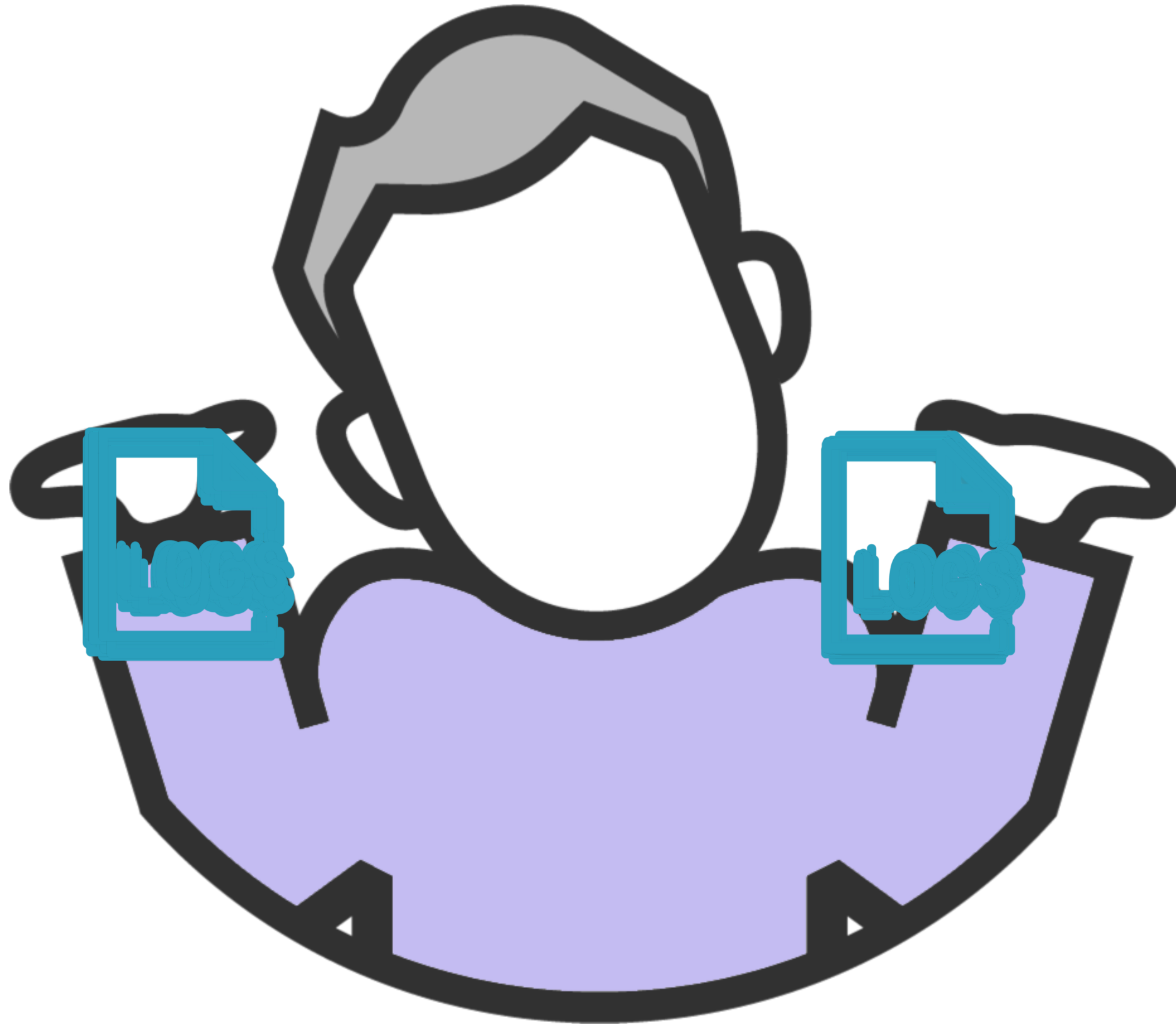
Security Analyst



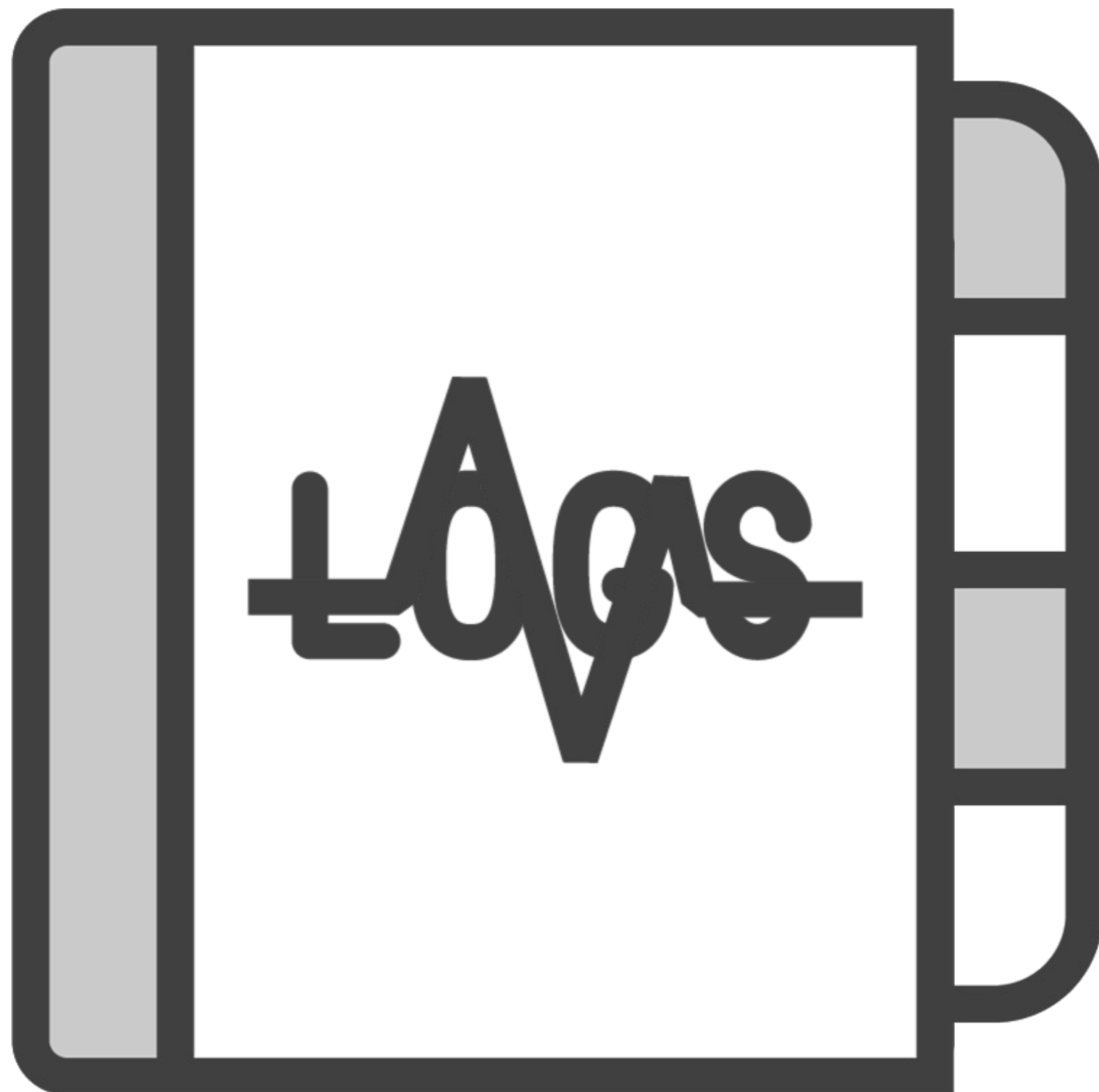
Security Analyst



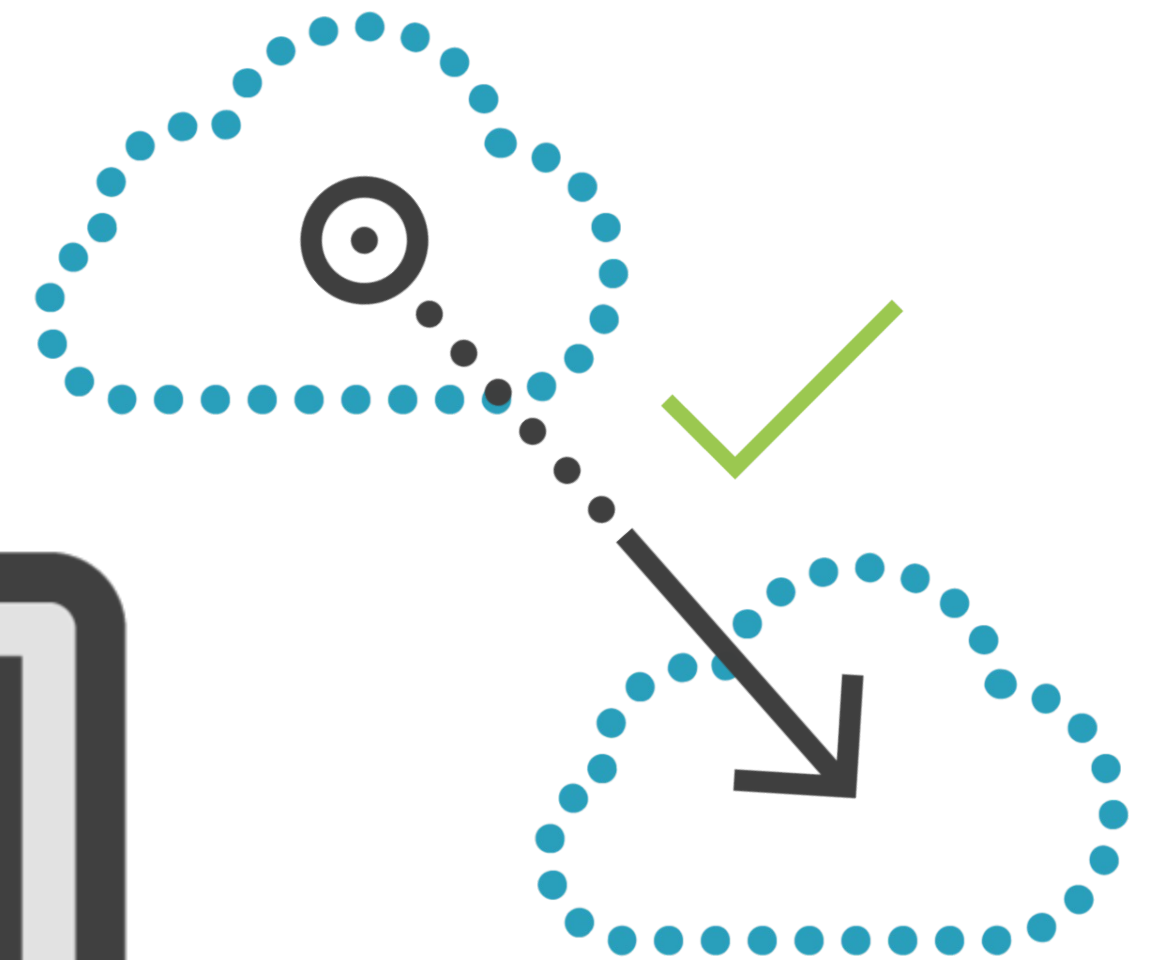
Security Analyst



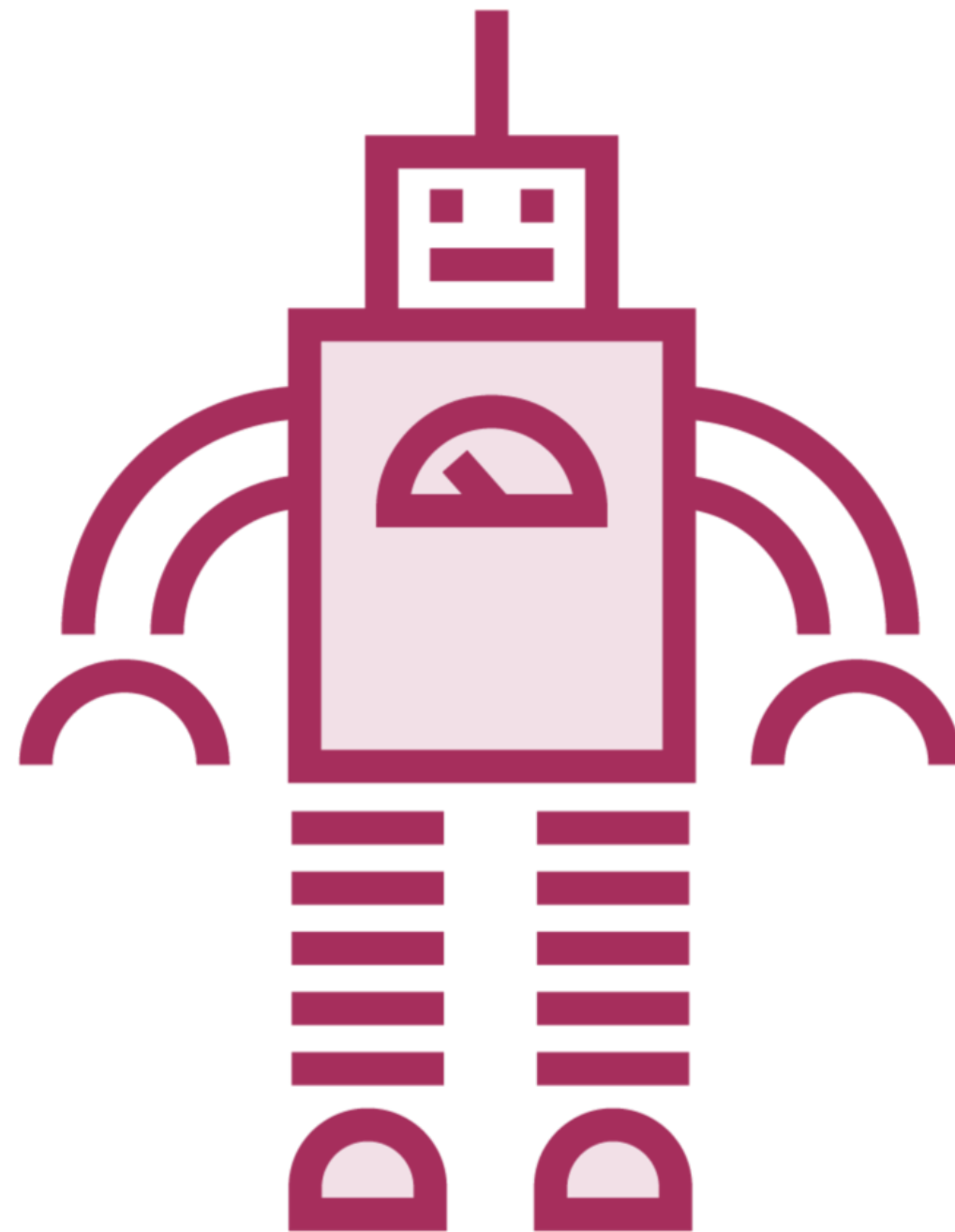
Security Analyst



Security Analyst



Security Analyst

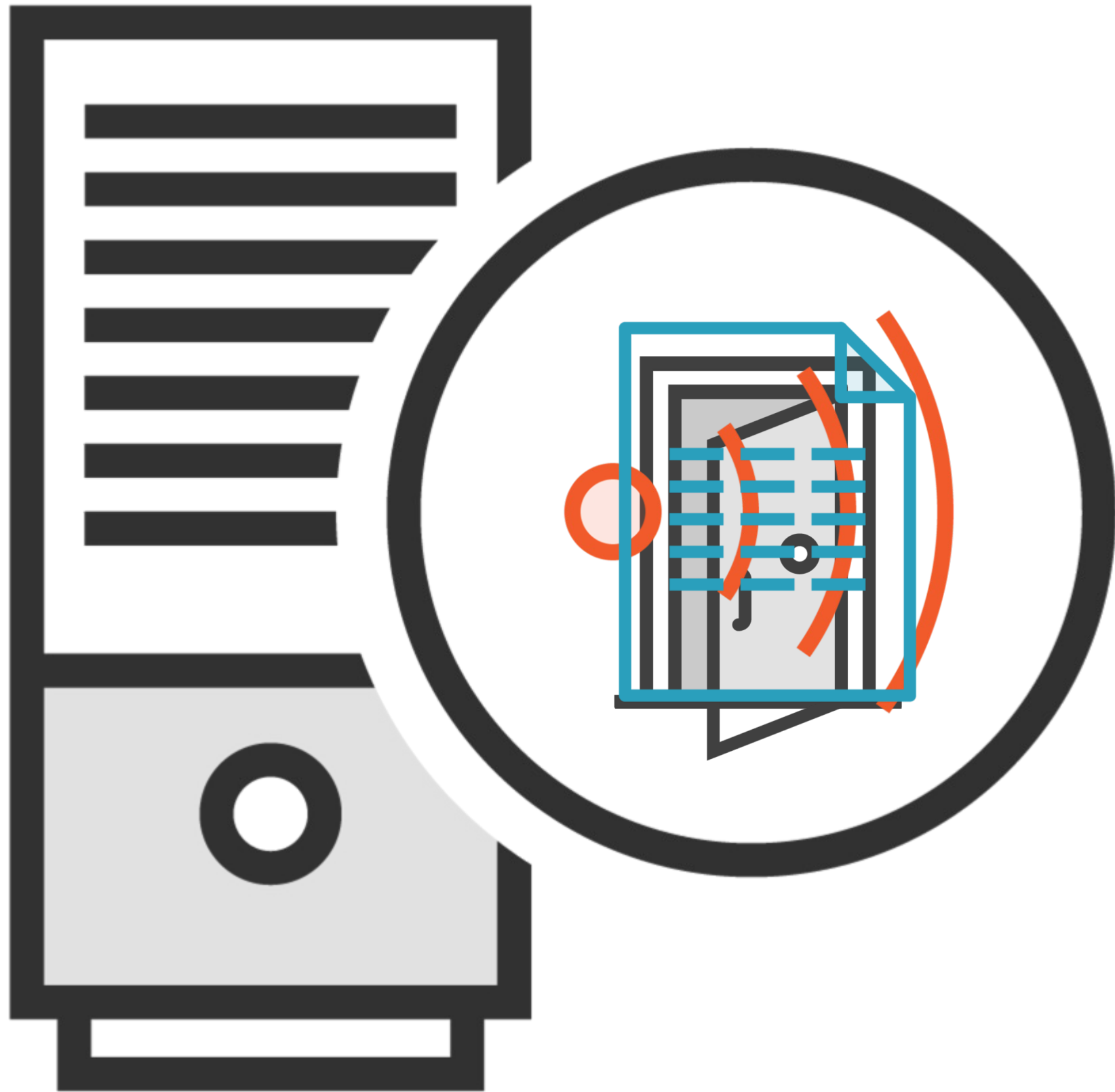


Automation

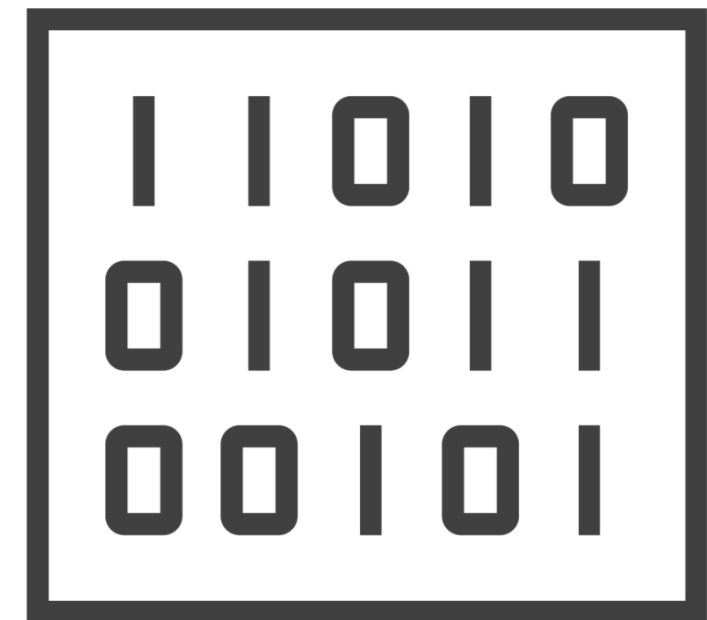
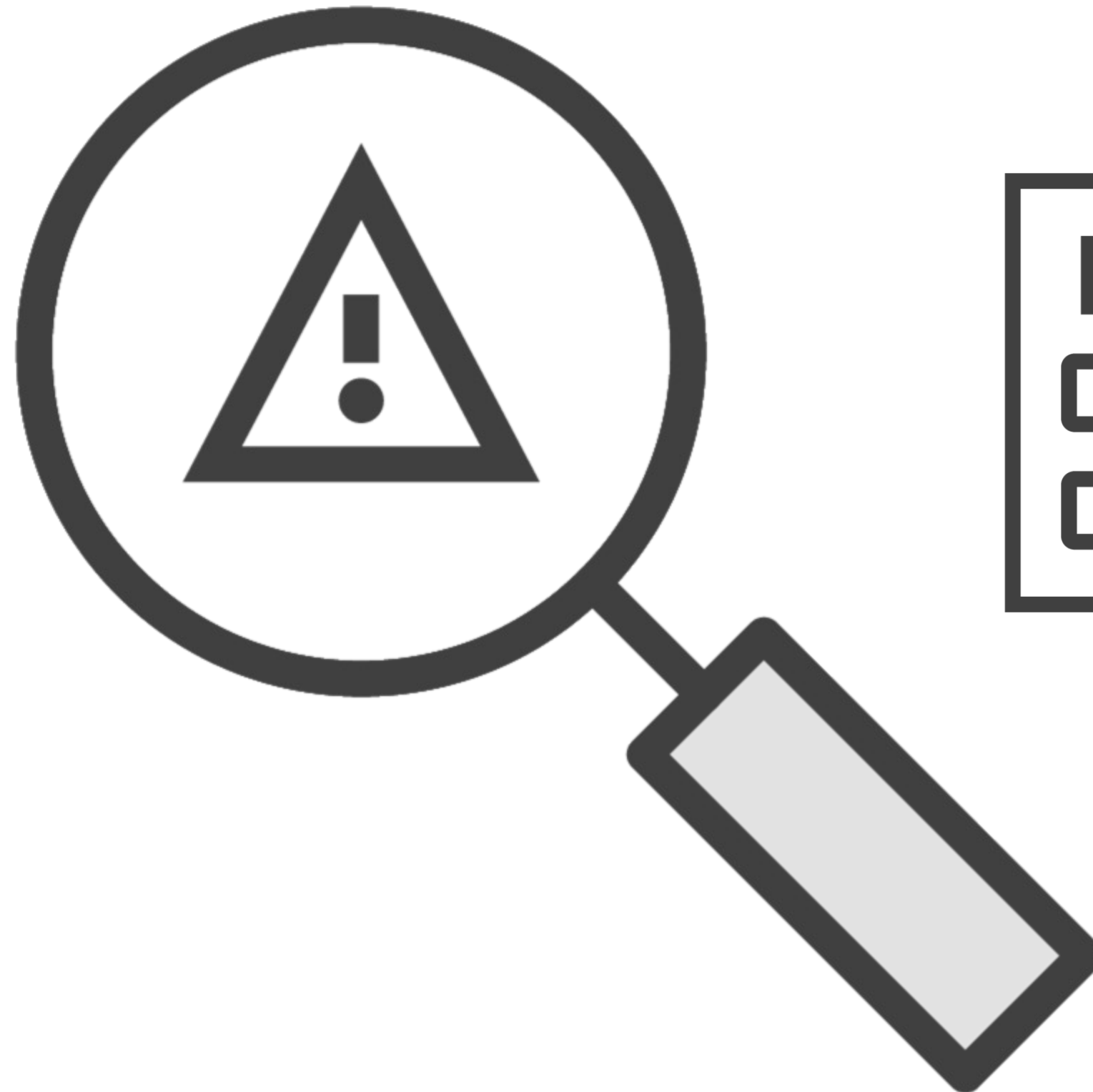
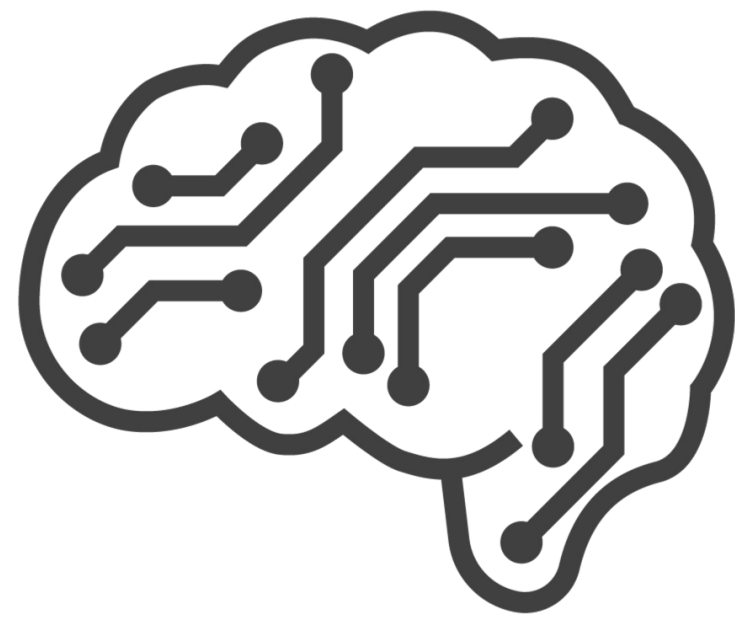




Awareness Trainer



Incident Responder



Forensics



More....

Packet Sniffing

Network Port Scanning

Debugging

Exploit Development

Forensics

Reputation Scanning

Encryption / Decryption

Reverse Engineering

Web

Fuzzing

Malware Analysis

Social Media Review



Up Next: Importance of Libraries and Packages



Importance of Libraries and Packages



Demo



Install Python on Windows

Install Visual Studio Code

Setup Code for Python

Search PyPI for packages

Install Packages with PIP



Implementations of Python



Implementations of Python



Cpython: original python implementation.



Jython: compiles your Python code to *Java* bytecode, so your Python code can run on the JVM



IronPython: lets you run Python on the Microsoft CLR (C# / .NET)



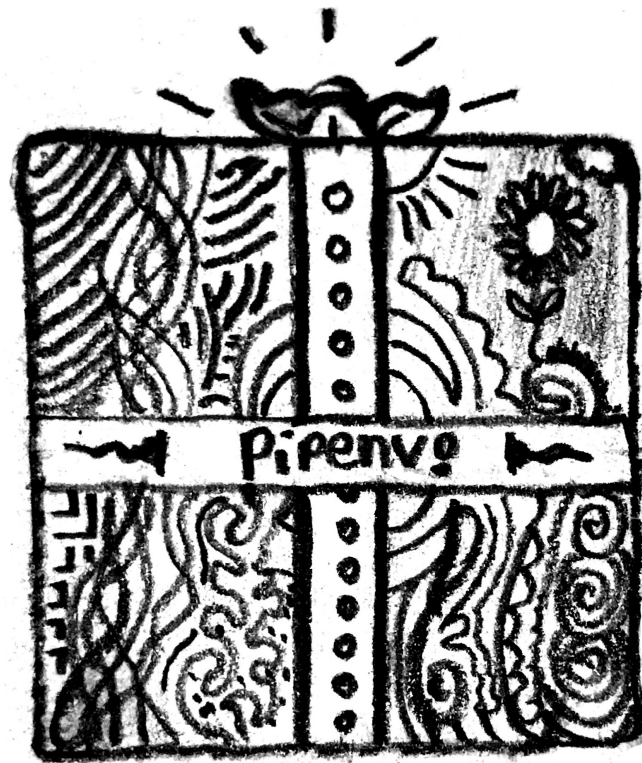
PyPy: compiles the source code during execution. Making it several times faster than CPython



Cython: not a Python interpreter but instead allows developers to compile python programs in the C language



Advanced Tools



PIPENV

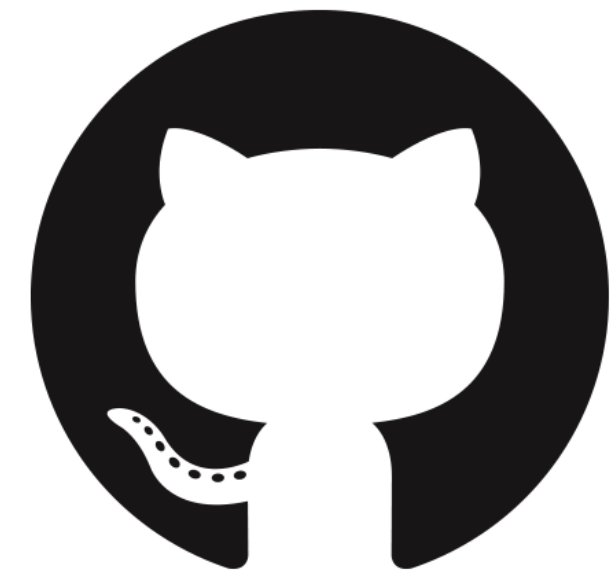
<https://pipenv.pypa.io/en/latest/>



Poetry

Poetry

<https://python-poetry.org>



PYENV

<https://github.com/pyenv/pyenv>

<https://github.com/pyenv-win/pyenv-win>



Summary



Why Python?

- Powerful Yet Easy to Learn
- Multi-Platform
- Open Source and Free
- Rich Set of Libraries

Many Common Uses

