Billy Tsouvalas

Teaching Assistant & PhD Student at SBU Electrical Engineer BSc, MSc IBM Certified Cybersecurity Analyst Stony Brook, NY +1 (804)-980-1233 vtsouvalas@cs.stonybrook.edu

Education

Stony Brook University (SBU)

2022-Present

Computer Science PhD

Virginia Commonwealth University (VCU)

2021-2022

Computer Science Graduate Studies

University of Patras

2014-2020

BSc, MSc from Electrical and Computer Engineering Department

Master's Thesis: Malware Classification Methodologies

Research

SBU PragSec Lab

2022-Present

Web Security and Online Deception

Moving Target Defense

Honeypots and Deceptive Security

VCU Modern Heuristics Research Group

2021-2022

Network Security and Cyber Threat Analysis and Characterization

Critical Infrastructure Cybersecurity

AI-Deep Learning Adversarial Examples Attacks

University of Patras Malware Analysis Team

2019-2020

Development of Static and Dynamic Malware Detection Tool

Participation in Cybersecurity Exercise Panoptes 2020

(Hellenic National Defence General Staff)

Participation in HackTheBox CTFs

Publications

2021

Marino, Daniel L., Chathurika S. Wickramasinghe, Billy Tsouvalas, Craig Rieger, and Milos Manic. "Data-Driven Correlation of Cyber and Physical Anomalies for Holistic System Health Monitoring." IEEE Access 9 (2021): 163138-163150.

2020

Tsouvalas, B. (2020). Malware classification methodologies.(link)

Work Experience

Web Applications

Social Media and Digital Marketing

SRII Tooching Assistant	2022-Present
SBU Teaching Assistant	2022 1 165611
TA for Computer Networks course	
Research on Web Security	
VCU Cybersecurity Research	2021-2022
Network Intrusion Detection and Prevention Systems	
Critical Infrastructure Cybersecurity: Energy Sector (Solar, Wind)	
VCU Cybersecurity Center Social Media	2021-2022
Administrator	
Social Media Marketing and Digital Presence	
University of Patras Research Intern	2019-2020
Static and Dynamic Malware Analysis and Detection	
Online Misinformation Propagation	
Website Development and Maintenance	2018-2020
Web Design/Development	

Certifications & Courses

Google IT Automation w/ Python Prof. Cert. Obtained: Oct. 2021

Course duration: 8 months

Cyber Incident Response Specialization Obtained: Aug. 2021

INFOSEC

Course duration: 4 months

IBM Cybersecurity Analyst Prof. Cert Obtained: Dec. 2020

Course duration: 8 months

Homeland Security and Cybersecurity Obtained: Dec. 2020

Specialization

University of Colorado, Colorado Springs

Course duration: 4 months

Usable Security Obtained: Nov. 2020

University of Maryland, College Park

Palo Alto Networks Academy Cybersecurity Obtained: Nov. 2020

Foundation

Palo Alto Networks

Generative Adversarial Networks (GANs) Obtained: Nov. 2020

DeepLearning.AI

Professional Skills

Malware Analysis

NSA Ghidra, Hex Rays IDA Pro, Radare, Malware Reverse Engineering, Control Flow Graphs, API Call Graphs

Penetration Testing and Forensics

OWASP, Burp Suite, Metasploit, NMAP, Hashcat, Aircrack-ng, Volatility

Network Security

IDS/IPS, Wireshark, Zeek, Suricata, Snort, Stratosphere IPS, Anomaly Detection, Intrusion Detection Datasets

Programming and Scripting

Python, C, C++, DSP Assembly, Java, Javascript, Git, Matlab

Soft Skills

Fast Learner Responsible Performance Under Pressure Team Work

Multitasking Stamina Verbal Communication Public Speaking

Languages

English^a

French^b

Greek (Native)

German

Misc

Military Service Obligations Fulfilled

2018-2019

Hellenic Navy

^aETS TOEFL Nov. 2020, Score: 115/120

^bDALF C1 CERF