KYLE DOMICO

PhD Student and Research Assistant

J+1 (814) 933-4303 ■ domico@cs.wisc.edu m kyle-domico kyledomico tyledomico kyledomico kyledomico tyledomico kyledomico tyledomico tyledomic

SUMMARY_

I am a PhD Student in the School of Computer, Data, and Information Sciences at the University of Wisconsin-Madison. I am a research assistant in the MadS&P computer security group and advised by Dr. Patrick McDaniel. My research interests lie at the intersection of computer security and reinforcement learning. In current work, I'm exploring and evaluating the efficacy of adversaries using reinforcement learning methods to attack machine learning models.

EDUCATION ____

Ph.D. Computer Sciences | University of Wisconsin-Madison

Sep 2023 - Present

Adviser: Dr. Patrick McDanielDoctoral Minor: Statistics

B.S. Computer Science | Pennsylvania State University

Aug 2020 - May 2023

GPA: 3.86 (Cum Laude) Minor: Mathematics

Publications ____

- Kunyang Li, **Kyle Domico**, Jean-Charles Noirot Ferrand, Patrick McDaniel. "The Efficacy of Transformer-Based Adversarial Attacks in Security Domains". In: *Workshop on Artificial Intelligence for Cyber (MILCOM 2023)*. Nov. 2023. URL: https://arxiv.org/abs/2310.11597
- Eric Pauley, **Kyle Domico**, Blaine Hoak, Ryan Sheatsley, Quinn Burke, Yohan Beugin, Patrick McDaniel. "EIPSIM: Modeling Secure IP Address Allocation at Cloud Scale". *ArXiv Preprint*. Oct. 2022. URL: https://arxiv.org/abs/2210.14999
- **Kyle Domico**, Ryan Sheatsley, Yohan Beugin, Quinn Burke, Patrick McDaniel. "A Machine Learning and Computer Vision Approach to Geomagnetic Storm Forecasting". In: 2nd Machine Learning in Heliophysics Conference (ML-HELIO 2022). Mar. 2022. URL: https://arxiv.org/abs/2204.05780

INVITED TALKS AND PRESENTATIONS _

A Machine Learning and Computer Vision Approach to Geomagnetic Storm Forecasting

March 2022

ML-Helio 2022 Poster Session

Boulder, CO (Hybrid)

A Machine Learning and Computer Vision Approach to Geomagnetic Storm Forecasting

Penn State ICDS Symposium 2021

University Park, PA

EXPERIENCE

Research Assistant | University of Wisconsin-Madison Madison Security and Privacy Laboratory

July 2023 - Present Madison, WI

Undergraduate Research Assistant | Pennsylvania State University *Systems and Internet Infrastructure Security Laboratory*

February 2021 - May 2023 University Park, PA

ACHIEVEMENTS & CERTIFICATIONS

• Alpha Fire Company Scholarship

May 2020

• Centre County Sports Hall of Fame Scholarship

May 2020

• Computer Sciences Departmental Scholarship

September 2023