Matthew Petillo

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TECH EXPERIENCE

Research Assistant, University of Kansas
2022-Present

I helped build systems to assist in research related to service meshes under the direction of Prof. Alex Bardas concerning security issues with multi-hop communications in microservices. A paper has been accepted into ACSAC 2024.

Technical Staff, California Institute of Technology
Summer 2023

I contributed to an ongoing project developing a proprietary leak detection system for a natural gas company under the direction of Prof. Axel Scherer. I successfully implemented a machine learning-powered system in collaboration with a research team. Work from this experience is still under active non-disclosure.

SURF Fellow, California Institute of Technology
Summer 2022

I helped to rebuild and reprogram real-time control of a microfluidics system with an attached microscope. Work from this experience is still under active non-disclosure.

OTHER EXPERIENCE

University Daily Kansan, University of Kansas
2021-2024

News Correspondent/Senior Reporter – 2021-22 Academic Year

I was responsible for writing 2-3 articles a week on a variety of topics, including crime and public safety, university administration, and student senate governance.

News Editor – 2022-23 Academic Year

I managed a staff of roughly 20 volunteer reporters, including an associate news editor, to put out daily reports on the University of Kansas. I edited national-award winning pieces and successfully ran the Kansan's 2022 Election coverage, including a 16-page voter guide and statewide election night coverage.

Editor in Chief – 2023-24 Academic Year

I ran the Kansan's editorial operations, expanding the brand across Lawrence and growing our digital circulation by 25%. I had over 120 staff members that I was responsible for, including 20 direct reports. I was able to double the Kansan's budget during my tenure and lead the newspaper to an All-Kansas award in the Public University Online/Digital category.

Data Journalist, Dow Jones News Fund/Kansas City PBS
Summer 2024

I was responsible for creating investigatory pieces using publicly available data and expert opinion. I wrote a piece which was the top performing piece for the YTD period as of September.

EDUCATION

Pursuing B.S., Computer Science, University of Kansas
Currently expected to graduate May 2026

Pursuing B.S., Multimedia Journalism, University of Kansas
Currently expected to graduate May 2026

ACHIEVEMENTS

Speaking Appearances

I appeared on KCUR (NPR in Kansas City) to talk about a major story that I broke regarding the suspension of a fraternity at the University of Kansas in 2022. I was also invited to speak about the Kansan's election coverage at a KU conference the following year.

Awards

I received and accepted a SURF fellowship award in 2022 and declined another in 2023. I was named a White House Correspondents Association scholarship winner in 2024 and attended the White House Correspondents Dinner. I received two Society of Professional Journalists Region 7 awards, being named a finalist in breaking news and the winner for campus reporting. I received my Eagle Scout award in 2019 and received my third-degree black belt in taekwondo in 2021.

Publications

- "Development of a Microfluidics System for Next-Generation Sequencing," California Institute of Technology, 9/17/22
- "CloudCover: Enforcement of Multi-Hop Network Connections in Microservice Deployments," ACSAC 2024. Pre-publication.

KEY SKILLS

JavaScript + Node.js, R, Python, Lua/Luau, C++, C, SQL, HTML, CSS, Docker, Kubernetes, Software Engineering, Team Management & Leadership, Analytical Writing, Public Speaking

REFERENCES

Upon Request