VLADIMIR MARTIROSYAN

GRADUATE RESEARCHER - MS INFORMATION SYSTEMS STUDENT

martiros@umd.edu | 785-770-5958 | Linkedin | Github: VladMartiro

RESEARCH INTERESTS

AI-mediated misinformation dynamics and causal inference in digital platforms and social networks. Identity and labor Economics. Neuro-symbolic AI applications for interpretable information systems.

AREAS OF SPECIALIZATION

Misinformation diffusion; AI-mediated communication; Social computing; Econometrics in digital platforms; Causal inference & A/B testing; Microeconomics and Macroeconomics, Business Network Effects; Knowledge graphs and neuro-symbolic AI

EDUCATION

Masters of Science in Information Systems **Aug 2024 - Dec 2025**
University of Maryland, Robert H. Smith School of Business
- GPA: 3.95

Bachelor of Science in Data Science **Sep 2019 - May 2024**
University of Wisconsin - Madison, College of Letters and Science
- Minor in Economics

PUBLICATIONS

Peer-Reviewed Papers
- **Martirosyan, V.** & Jahani, E. (2024). "*Misinformation Sharing Across Platforms and Its Determinants.*" under review.
- **Martirosyan, V.** & Kamdar, R. (2024). "*How Verification Alters Cultural Signals in Employer Reviews*." under review.

Working Papers
- **Martirosyan, V.** & Prasad, K. "*Assessing the Maryland Business Climate and the Impact of Federal Policy Changes.*" In preparation.
- **Martirosyan, V.** & Clark, J. "*Machine Learning in Information Systems: A Benchmarking Framework.*" In preparation.
- Regli, W., Colelough, B., Murali, B., **Martirosyan, V.,** et al. (2025). *Neuro-Symbolic AI in 2025: A systematic review*. (In preparation, anticipated submission December 2025 to *IEEE transactions on neural networks and learning systems*.)

RESEARCH EXPERIENCE

Research Assistant | University of Maryland | PI: Professor Kislaya Prasad **May 2025 - Aug 2025**
- Spearheaded the survey design, webscraping, data collection, cleaning, and analysis for the Maryland Business Climate & Federal Policy Impact Survey (Close to 5000 businesses).
- Produced descriptive dashboards and survey briefs that informed ongoing discussions with state economic-development agencies.
- Co-authored a working paper: “Assessing the Maryland Business Climate and the Impact of Federal Policy Changes.”

Research Assistant | University of Maryland | PI: Professor Jessica Clark **Apr 2025 - Aug 2025**
- Conducted a systematic literature review of 100+ machine-learning papers in Information Systems to identify differences in machine learning improvements based on the IS domains.
- Developed a Python “benchmarker” script powered by a local LLM with neuro-symbolic guardrails to automatically read PDFs and extract quantitative performance metrics (e.g., accuracy, AUC)
- Achieved bulk extraction of metrics locally from 15 papers in 1 minute with near-perfect accuracy, enabling large-scale comparison of ML models in IS research.

WORK EXPERIENCE

Data Analyst | Center for Global Business, University of Maryland **Dec 2024 - Aug 2025**

- Analyzed sales and participation data for Education Abroad programs (10k+ student-records) to identify trends in enrollment and outcomes.
- Co-developed the comparative report International Experience as a Career Asset: Exploring the Earnings Impact of Education Abroad Participation showing academic outcomes for students who did vs. did not participate in study-abroad, supporting evidence-based program design and funding decisions.

Data/Statistical Analyst | Dissemination & Implementation (D&I) Consultation Service, Madison **Oct 2022 - Dec 2023**

- Reviewed medicine-affiliated research projects for data-quality and visualization standards; enhanced dashboards to improve clarity for clinical researchers and grant reports.
- Conducted supplementary statistical analyses (e.g., regressions, randomization checks, DID estimations) on request to strengthen the evidence base of D&I studies.

Interviewer | Survey Center, University of Wisconsin-Madison **Nov 2021 - May 2022**

- Collected high-quality survey data from thousands of respondents for national health & social-science studies via computer-assisted telephone interviewing (CATI).
- Consistently met or exceeded weekly call-completion and data-accuracy benchmarks, contributing to reliable longitudinal datasets.

TEACHING EXPERIENCE

Teaching Assistant | University of Maryland | Professor Manmohan Aseri **Aug 2025 - Present**
***BUDT 704: Data Processing and Analysis* (Graduate Course)**

- Led in-class lab sessions guiding students in Python-based data analysis, machine learning, and visualization techniques.
- Designed 5+ homework and project assignments that emphasized applied analytics and reproducible workflows. Added AI/ML components into assignments to keep them timely and relevant.
- Met and consulted over 10 students on projects and assignments outside working hours, helping students troubleshoot code and improve project outcomes.

Teaching Assistant | University of Maryland | Professor Lauren Rhue **Aug 2025 - Present**
BMGT 207: The Ethics of AI

- Co-designed course materials with the instructor, including tutorials, case studies, and in-class activities.
- Led weekly office hours (twice a week, 2 hours each) providing individualized guidance on assignments and ethical frameworks in AI.
- Facilitated small-group discussions and delivered presentations on selected course topics to deepen student engagement.

SKILLS

- **Programming:** Python, R, STATA, SQL, Neo4j, JAVA
- **Statistical Analysis:** Econometrics, A/B Testing, Staggered DiD, Matching, 2SLS, Regression Discontinuity, Causal Inference, Survey Research Design, Statistical Modeling
- **Machine Learning:** Supervised/Unsupervised Learning, Model Benchmarking, LLM Prompting & RAG Pipelines, Graph Neural Networks, Knowledge Graphs, Neuro-Symbolic AI, Model Evaluation (AUC, F1, etc.)
- **Data Management:** Relational & NoSQL databases, Big-data processing (Pig Latin, PySpark, Hadoop), API integration, Data Cleaning & Transformation Pipelines
- **Research Methods:** Experimental & Quasi-Experimental Design, Field Studies, Natural Experiments, Observational Studies, Survey Sampling & Weighting
- **Languages:** Armenian (Native), Russian (Native), French (Fluent), German (Beginner)

AWARDS

- First Runner-Up, AGA Datathon | National Leadership Training, Washington D.C. | 2025
- Terrapin Scholar Two-Time Academic Scholarship ($2500) | University of Maryland | 2024
- First Place, AI in Business Case Competition ($10,000 Total Prize) | University of Maryland | 2024
- First Runner-Up, Data Management and Technology Case Competition ($1000 Total Prize) | 2024

SERVICE AND LEADERSHIP

President | Masters in Information Systems Association | University of Maryland | 2024-2025

- Elected as Class President of the largest Masters Program (~150 students) at the University's Business School, leading the student association's team of 6.

Creator | Info Systems AI-Powered Mentorship Program | University of Maryland | 2024-2025

- Developed an AI-enhanced platform connecting advisory council members, alumni, and current students. Secured ~$10,000 in funding for development from the Business School.

Student Ambassador | Robert H. Smith | University of Maryland | 2024-2025

- Worked as a Student Ambassador for the Information Systems applicants, connecting and guiding 100+ prospective students in their applications.

Co-Founder | Cardinal Algorithmic Trading Group | 2022-2024

- Co-Founded an algorithmic and quantitative trading group, occasionally interviewing new members and designing 10+ monthly workshops in quantitative methods and models.

PRESENTATIONS & INVITED TALKS

Speaker | University of Maryland Smith Business School Orientation | 2025

- Welcomed more than 100 incoming graduate students in Information Systems. The topics included tips in academic life, tools to master, and ways to get engaged with the University and student leadership.

Session Speaker | University of Maryland Advisory Council Day | 2025

- Invited to present the topic of Mentorship and its importance in the field of Operations and Information Technology with over 120 attending advisory council members, alumni, industry professionals, and students.

Presenter | UMD Inaugural Business and Technology Career Day | 2025

- Scheduled to present and kickoff the inaugural "Technology Career Day" at UMD Smith, featuring 200+ participants and 20+ industry professionals.

MEDIA COVERAGE & RECOGNITION

"MSIS Mentorship Program Uses AI to Strengthen Alumni-Student Connections" | University of Maryland News | 2025

"AI in Action: Students Deliver Ethical, Practical Solutions for Local Businesses" | University of Maryland News | 2024

REFERENCES

Available Upon Request