

# ANDREA NDUBIZU

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Department of Management Information Systems Eller  
College of Management,  
1130 E Helen St. Tucson, AZ 85721

## EDUCATION

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<b>Ph.D.</b>	Management Information Systems (MIS) The University of Arizona Advisor: Dr. Hsinchun Chen Minor: Cognitive Science	2021–2026
<b>MS</b>	Computer Information Systems with Boston University	2020
<b>BSBA</b>	Computer Information Systems Rider University Graduate Summa Cum Laude	2018

## RESEARCH INTERESTS

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**Domain:** Cybersecurity, Vulnerability Assessment, Vulnerability Propagation and Compliance, Open-Source Software Security, Semiconductor Security, Quantum Computing Security, Internet of Things (IoT) Security.

**Methods:** Deep Learning (Attention Mechanisms, Retrieval-Augmented Generation, Graph Retrieval Augmented Generation, Machine Learning, Network Science (Multi-Task Learning).

## PUBLICATIONS

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### Journal Papers Under Review

1. **A. Ndubizu**, S. Ullman, S. Samtani, H. Zhu, and H. Chen “Generating Security Nutrition Labels for Internet of Things Devices: A Multi-Task Learning Approach” *Revise and Resubmit (Second Round) at MIS Quarterly (MISQ)*.

### Work-In-Progress Journal Papers

1. **A. Ndubizu**, S. Ullman, S. Samtani, and H. Chen “Identifying Vulnerability Propagation in Semiconductor and Quantum Code Clones: A Retrieval-Augmented Generation Approach” *Preparing for Submission to Information Systems Research (ISR)*.
2. **A. Ndubizu**, S. Ullman, S. Samtani, and H. Chen “Identifying and Remediating Vulnerability Propagation in Semiconductor Operational Technology Systems: A Graph Retrieval Augmented Generation Approach” *Preparing for Submission to Management Information Systems Quarterly (MISQ)*.

### **Refereed Workshop Papers (No Proceedings; \*indicates I am the presenting author)**

1. **\*A.Ndubizu**, S.Ullman, and H.Chen “RAG-VP: Identifying Vulnerability Propagation in Semiconductor and Quantum Code Clones” *Workshop on Information Technologies and Systems (WITS)*. Nashville, TN. December 2025.

## INVITED TALKS AND EXTERNAL PRESENTATIONS

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1. *Production and Operations Management Society (POMS)*. **Presentation Title:** “RAG-VP: Identifying Vulnerability Propagation in Semiconductor and Quantum Code Clones” May 7, 2026.

## PROFESSIONAL SERVICE

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### Ad-hoc Reviewer: Conferences (with and without proceedings)

- Workshop on Artificial Intelligence-Enabled Cybersecurity Analytics (ACM KDD AI4Cyber)
- International Conference on Information Systems (ICIS)
- Workshop on Information Technologies and Systems (WITS)

## HONORS AND AWARDS

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### Awards:

- SWSIS Scholar by the Scholarship for Women Studying Information Security (SWSIS) program. 2018
- Rider University Advantage Scholarship. 2015
- Rider University Founders Award. 2015
- Rider University Brodsky College of Business Honors Program. 2015

### Other:

- Doctoral Consortium, Americas Conference on Information Systems (AMCIS). 2025

## TEACHING EXPERIENCE

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### University Courses:

Role	Semester	Course	Location	# Students
GTA	Spring 2026	MIS 111/112: Computers and the Internetnetworked Society	UArizona	1,000*
GTA	Fall 2025	MIS 11/112 : Computers and the Internetnetworked Society	UArizona	1,000*
Instructor	Fall 2024	MIS 562: Cyber Threat Intelligence	UArizona	33
Instructor	Fall 2023	MIS 331: Database Management Systems	UArizona	33
GTA	Spring 2023	MIS 304: Using and Managing Information Systems	UArizona	300
GTA	Fall 2022	MIS 111/112: Computers and the Internetnetworked Society	UArizona	1,000*
GTA	Spring 2022	MIS 111/112: Computers and the Internetnetworked Society	UArizona	1,000*
GTA	Fall 2021	MIS 11/112: Computers and the Internetnetworked Society	UArizona	1,000*
GTA	Fall 2019	MET 521: Information Structures with Python	Boston University	25

### External:

- **AZ Cyber Initiative – Cyber Bootcamp** (High School Bootcamp). 2022, 2023 Instructor.

## WORK EXPERIENCE

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<b>University of Arizona</b> <i>Graduate Research/Teaching Assistant</i>	2021 – Present
<b>Aetna, a CVS Health Company</b> <i>Junior Oracle Data Engineer</i>	2019- 2020

## PROFESSIONAL AFFILIATIONS

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- Association for Information Systems (AIS), Member.
- Institute of Electrical and Electronics Engineers (IEEE), Member.
- Association for Computing Machinery (ACM), Member.
- Institute for Operations Research and Management Sciences (INFORMS), Member.

## TECHNICAL SKILLS

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- **Databases:** Oracle, MySQL, MongoDB.
- **Programming Languages:** Python, Java.
- **Visualization:** Tableau, Gephi.
- **Data Mining Tools:** SPSS, scikit-learn.
- **Deep Learning Modules:** TensorFlow, Keras, PyTorch.
- **Security Tools:** Nmap, Wireshark, SQL Nessus, Flawfinder, SonarQube, Bandit. Autopsy
- **Operating Systems:** Linux (Ubuntu, Kali), Windows.