ALICIA ESQUIVEL-MOREL

📞 +1 404 804 2412   ✉ ace6qv@mail.missouri.edu   📍 704 S - College Avenue, Columbia-MO

🎓 EDUCATION

University of Missouri Columbia - Missouri, USA	**Doctorate in Computer Science (PhD CS)** Expected graduation date: Fall 2025 - GPA: 3.7
University of Missouri Columbia - Missouri, USA	**Master of Science in Computer Science (MS CS)** 2018-2020 - GPA: 3.7/4.0
Universidad Tecnológica Intercontinental Caacupé, Paraguay	**Licentiate in Computer Systems Analysis** 2008-2013 - GPA: 4.81/5.0

📑 RESEARCH INTERESTS

Management and security of distributed/cloud computing applications | Internet of Things (IoT)-based Visual Cloud Computing | Network performance measurement and monitoring | Cyber Security for Critical Application Infrastructures.

⚙ TECHNICAL SKILLS AND EXPERIENCE

Matlab · C · Python· Networking · DevOps · Cloud Computing · Amazon Web Services
Design of Experiments (DOE) · Technical Writing · Presentation Skills · Applied Research · Data Analysis
Testing · Cross-functional Team Leadership · Linux (Ubuntu), Mac OS, Windows OS

💼 EMPLOYMENT HISTORY

University of Missouri - Columbia

Graduate Research Assistant - VIMAN Lab   January 2020 – Present

Research involving drone video analytics applications, security in the communication, network-edge and computation in drones. Simulation frameworks, testbeds and hybrid deployments.

University of Missouri - Columbia

Graduate Teaching Assistant

Cs4530 / 7530 - Cloud Computing [Undergraduate and Graduate class ~70 students]   January 2023 – Present
CS2830 - Web Development I [Undergraduate class ~300 students]   August – December 2019
CS1050 - Algorithm Design and Programming I [Undergraduate class ~300 students]   August 2021 – May 2022

Assisting with teaching, grading and administering exams, working with students, and other duties as assigned, including assistance on other projects for the class.

University of Missouri - Columbia

REU - Research Experience for Undergrads   May 2020 – August 2020
Consumer Networking Technologies   May 2021 – August 2021
Software-defined networking/virtualization, visual computing at the   May 2022 – August 2022
network edge, social virtual reality, mobile sensing & environment recognition.

Work as a mentor for undergraduate students, engaging in summer research involving a variety of problems involving consumer networking technologies.

PUBLICATIONS AND RESEARCH WORK

Trust Quantification in a Collaborative Drone System with Intelligence-driven Edge Routing
2023

Alicia Esquivel Morel, Ekincan Ufuktepe, Cameron Grant, Samuel Elfrink, Chengyi Qu, Prasad Calyam, and Kannappan Palaniappan
IEEE/IFIP Network Operations and Management Symposium (NOMS)

Transmitting Information with Global-designation of Emergency Routes for Edge Video Processing
2023

Michael Miller, Anvitha Ramachandran, **Alicia Esquivel Morel**, Durbek Gafurov, and Prasad Calyam
IEEE/IFIP Network Operations and Management Symposium (NOMS)

Network Services Management using Programmable Data Planes for Visual Cloud Computing
2023

Alicia Esquivel Morel, Prasad Calyam, Chengyi Qu, Cong Wang, Komal Thareja, Anirban Mandal, Eric Lyons, Michael Zink, George Papadimitriou, and Ewa Deelman
International Conference on Computing, Networking and Communications (ICNC)

Automating Edge-to-Cloud Workflows for Science: Traversing the Edge-to-Cloud Continuum with Pegasus
2022

Ryan Tanaka, George Papadimitriou, Sai Charan Viswanath, Cong Wang, Eric Lyons, Komal Thareja, Chengyi Qu, **Alicia Esquivel Morel**, Ewa Deelman, Anirban Mandal, Prasad Calyam, Michael Zink
22nd IEEE International Symposium on Cluster, Cloud and Internet Computing (CCGrid).

Location Prediction and Trajectory Optimization in Multi-UAV Application Missions
2022

Singh, Rounak, Chengyi Qu, **Alicia Esquivel Morel**, and Prasad Calyam
Intelligent Unmanned Air Vehicles Communications for Public Safety Networks

Learning-based Multi-Drone Network Edge Orchestration for Video Analytics
2022

Qu, Chengyi, Rounak Singh, **Alicia Esquivel Morel**, and Prasad Calyam
INFOCOM 2022-IEEE Conference on Computer Communications. IEEE, 2022

Obstacle-Aware and Energy-Efficient Multi-Drone Coordination and Networking for Disaster Response
2021

Chengyi Qu, Rounak Singh, **Alicia Esquivel Morel**, Francesco Betti Sorbelli, Prasad Calyam, Sajal K Das
2021 17th International Conference on Network and Service Management (CNSM)

Using ns-3 with the POWDER wireless testbed
2021

Tom Henderson, **Alicia Esquivel Morel**
WNS3 2021 Tutorials

Enhancing Network-edge Connectivity and Computation Security in Drone Video Analytics
2020

Alicia Esquivel Morel, Deniz Kavzak Ufuktepe, Robert Ignatowicz, Alexander Riddle, Chengyi Qu, Prasad Calyam, Kannappan Palaniappan
2020 IEEE Applied Imagery Pattern Recognition Workshop (AIPR)

Dronenet-sim: A learning-based trace simulation framework for control networking in drone video analytics
2020

Chengyi Qu, **Alicia Esquivel Morel**, Drew Dahlquist, Prasad Calyam
Proceedings of the 6th ACM Workshop on Micro Aerial Vehicle Networks, Systems, and Applications

Design of trace-based NS-3 simulations for UAS video analytics with geospatial mobility
2020

Chengyi Qu, **Alicia Esquivel Morel**, Drew Dahlquist, Prasad Calyam
Geospatial Informatics X - International Society for Optics and Photonics

✓ PROFESSIONAL SERVICE

Serve as peer-reviewer of several international IEEE/ACM conferences and journals

Globecom · TNSM · Wi-DroIT · IEEE ETT· IEEE TDSC · FGCS · COMNET · IJNM · JPDC
IEEE SECON · CNSM · IPCCC - IEEE · IEEE ICC - NGNI Symposium

✓ SCHOLARSHIPS AND AWARDS

National Science Foundation (NSF)-sponsored grant   2023
POWDER-RENEW Mobile and Wireless Week

National Science Foundation (NSF)-sponsored grant   2022
FABRIC KNIT5 (Keeping Networks Innovative Together) community workshop

National Science Foundation (NSF)-sponsored grant   2022
IEEE ICC 2022 [IEEE International Conference on Communications] conference

Department of Defense University Consortium for Cybersecurity (DoD-UC2)   2022
Top three white paper request winner for information (RFI) to the academic community on new cyber
technologies pertaining to the topic of implementing zero trust at the tactical warfighting edge

Electrical Engineering and Computer fellowship award, University of Missouri   2022
Student travel EECS fellowship award

Upsilon Pi Epsilon (UPE)   2021
The International Honor Society for the Computing and Information Disciplines.

Fulbright-CAL Scholarship, LASPAU - Administered   2018-2020

Fulbright Intensive English Program, IIE - Administered   2018

United States Embassy in Paraguay   2012-2014
Hayes Scholarship - English Micro scholarship Program for Advanced level courses

✓ PROFESSIONAL AFFILIATIONS AND VOLUNTEER WORK

IEEE
Communications Society (ComSoc), Young Professionals, Communications Society,   2020-Present
Women in Engineering

Epsilon Pi Epsilon   2021-Present
Honor Society for the Computing and Information Disciplines

Volunteer in social and educational projects   2014-Present
Fulbright Association in Paraguay

Founder and member of the State Alumni Paraguay SAP   2015-2019
Alumni Association from the Government of the United States in Paraguay