Carlos Aldana Lira

caa5p@mtmail.mtsu.edu | www.aldats.dev

EDUCATION

2021–2025 (Expected) | B.S., Computer Science (Professional Concentration)
Middle Tennessee State University (4.0 GPA)
Minors: Interactive Media, University Honors

RESEARCH EXPERIENCE

Spring 2024–Present | Undergraduate Honors Thesis
Middle Tennessee State University
Thesis Director: Dr. Tasha Frick

- Proposed and designed original research investigating concepts and strategies Computer Science novices enter introductory programming classrooms with and the ways they support expert-level competency. Currently in progress.

Summer 2023 | Undergraduate Experiential Training
Middle Tennessee State University
Supervisor: Dr. Ramchandra Rimal

- Conducted original research investigating the efficacy of using deep neural network and tree-based, gradient-boosted models for Bitcoin price prediction using historical, blockchain, technical, and macroeconomic data and quantitative data analysis.

PRESENTATIONS

Carlos Aldana Lira & Ramchandra Rimal. Bitcoin Price Prediction Using Machine Learning. In Chemistry Research Using X-Ray Methods and Undergraduate Experiential Training Summer Poster Session. July 28, 2023. Middle Tennessee State University, Murfreesboro, TN.

TEACHING & MENTORING

Spring 2024 | Learning Assistant
Middle Tennessee State University, Chemistry Department
Supervisors: Dr. Katy Hosbein & Dr. Grant Gardner

- Participated in professional development to read and apply education science literature, peer mentored students in an introductory biology course using evidence-based teaching and learning techniques, and designed assessments for student learning, and conducted class sessions.

AWARDS & HONORS

2023 Outstanding Sophomore Award
Middle Tennessee State University Computer Science Department
2023 General Education Writing Awards (2nd Place)
Middle Tennessee State University English Department
2022 Outstanding Freshman Award
Middle Tennessee State University Computer Science Department