Michael Evans

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EDUCATION

University of Pennsylvania Aug 2025-Present
Master of Science in Engineering in Artificial Intelligence
GPA: Incoming

Old Dominion University 2025
Bachelor of Science in Computer Science
GPA: 3.95/4.00

Tidewater Community College
Associate of Science in Computer Science, Business Administration 2023, 2019
GPA: 3.96/4.00

PUBLICATIONS

Conference Proceedings

M. Evans, M. Machado, R. Johnson, L. Escamilla, A. Vadella, B. Froemming-Aldanondo, T. Rastoskueva, M. Jostes, D. Butani, R. Kaddis, C. Chung, and J. Siegel. A Roadside Unit for Infrastructure Assisted Intersection Control of Autonomous Vehicles. *IEEE International Conference on Electro/Information Technology (EIT)* 2025.

B. Froemming-Aldanondo, T. Rastoskueva, **M. Evans**, M. Machado, A. Vadella, L. Escamilla, R. Johnson, M. Jostes, D. Butani, R. Kaddis, C. Chung, and J. Siegel. Evaluating Low-Resource Lane Following Algorithms for Compute-Constrained Automated Vehicles. *IEEE International Conference on Artificial Intelligence, Robotics, and Control (AIRC)* 2025.

Workshops

Michael Evans, Dominik Soós, Ethan Landers, and Jian Wu. MSVEC: A Multidomain Testing Dataset for Scientific Claim Verification. In *International Symposium on Theory, Algorithmic Foundations, and Protocol Design for Mobile Networks and Mobile Computing (MobiHoc)* 2023.

TALKS

A Roadside Unit for Infrastructure Assisted Intersection Control of Autonomous Vehicles
IEEE International Conference on Electro/Information Technology, Valparaiso University, 2025.

Robust Lane Following with V2X Traffic Management
Research Experience for Undergraduates, Lawrence Technological University, 2024.

The Potential of Large Language Models in Evaluating Scientific Claims
Undergraduate Research Symposium, ODU Digital Commons, 2024.

MSVEC: A Multidomain Testing Dataset for Scientific Claim Verification
The 8th National Workshop for REU Research in Networking and Systems, George Washington University, 2023.

Scientific News Verification With GPT
Research Experience for Undergraduates, Old Dominion University, 2023.

RESEARCH EXPERIENCE

Undergraduate Research Assistant Sept 2024-Present
ODU Vision Lab, advised by Dr. Khan Iftekharuddin

- Applied model fine-tuning the VGG16 convolutional neural network (CNN) for target identification with a surveillance robot capable of identifying, tracking, and following individuals with PyTorch.
- Improved the motion planning algorithm in MATLAB for target following through tight, cluttered environments, enabling safe indoor operation previously limited to outdoor use.

NSF REU - Developing Self-Drive Algorithms for Electric Vehicles May-July 2024
Lawrence Tech and Michigan State University, advised by Dr. Chung and Dr. Siegel
Computer Science & Artificial Intelligence Robotics Lab

- First-authored *A Roadside Unit for Infrastructure Assisted Intersection Control of Autonomous Vehicles* as the lead researcher on a team of 7 undergraduates.
- Formulated an adaptive speed algorithm to reduce acceleration and braking by up to 75.35% for minimizing fuel consumption, and developed robust self-driving algorithms using ROS, OpenCV, and Scikit-learn.
- Assembled a V2X wireless communication architecture with a roadside unit capable of dynamically adjusting vehicle speed in response to traffic states, and deployed an Arduino-powered traffic light for visualization.

NSF REU - Disinformation Detection and Analytics June-Aug 2023
Old Dominion University, advised by Dr. Jian Wu
Lab for Applied Machine Learning and Natural Language Processing Systems

- Wrote *MSVEC: A Multidomain Testing Dataset for Scientific Claim Verification* as the first author.
- Conducted prompt engineering with hyperparameter tuning and expanded the project corpus from 56 to 200 data points for testing the effectiveness of the GPT-3.5-turbo model on generalizing to multiple domains.
- Calculated the precision, recall, and F1 score on zero-shot classification with the GPT-3.5-turbo model against the MSVEC dataset on two sub-tasks: stance labeling and identifying sentence rationales.

PROFESSIONAL EXPERIENCE

Junior PHP Web Developer Dec 2021-June 2022
Hard to Find Party Supplies

- Collaborated with the director of IT to maintain $1m/year eCommerce platform by performing server maintenance, writing documentation, designing web pages, and updating inventory of 35,000 products.
- Revised XML web page modifications from PHP to TWIG during a complete server rework while utilizing the MVC design pattern, CSS, and HTML.
- Shaped the site Admin page by writing quality-of-life features for back-end users and setup network for secondary location during business expansion.

SELECTED TECHNOLOGIES

Programming Languages
Python, C++, MATLAB, PHP, JavaScript, GDScript

Libraries & Frameworks
PyTorch, OpenCV, ROS, Scikit-learn, Pandas, NumPy, Matplotlib, React, Express

AWARDS

NSF CISE REU Travel Grant – $1,200 May 2025
Research Profile Highlight – Old Dominion University College of Sciences Newsletter Nov 2024
BIO, GEO, CISE and OCE REU Travel Grant – $1,200 Sept 2023
Academic Excellence Award – Tidewater Community College April 2020, Mar 2023

SERVICE & MEMBERSHIPS

Congressional App Challenge (CAC), *Vision Lab Exhibitor* Dec 2024
Intelligent Ground Vehicle Competition (IGVC), *Surveyor* Jun 2024
Institute of Electrical and Electronics Engineers (IEEE), *Student Member* Jun 2024-Present
Association for Computing Machinery Group at ODU, *Member* Jan 2024-Present
STEM Day Expo, Wilson High School, *Volunteer Exhibitor* Mar 2019
National Mathematics Honor Society at TCC (MAΘ), *Member* Feb 2019-Present