

Michael Evans

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☎ (757) 236-1257

EDUCATION

Old Dominion University

M.S. in Computer Science, B.S. in Computer Science
GPA: 3.95/4.00

Expected May 2027, May 2025

Tidewater Community College

A.S. in Computer Science, A.S. in Business Administration
GPA: 3.96/4.00

May 2023, May 2019

PUBLICATIONS

Peer-Reviewed Papers

C2. 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.

C1. 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.

W1. M. Evans, D. Soós, E. Landers, and J. Wu. MSVEC: A Multidomain Testing Dataset for Scientific Claim Verification. *National Workshop for REU Research in Networking and Systems (REUNS @ ACM MobiHoc)* 2023.

Preprints

P1. M. A. Witherow, M. Evans, A. Temtam, H. Okhravi, and K. M. Iftekharuddin. Machine Learning-Enhanced Non-Amnesic Alzheimer's Disease Diagnosis From MRI and Clinical Features. *Brain (target)* 2025.

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

Research Assistant

Sept 2024-Present

ODU Vision Lab, advised by Dr. Khan Iftekharuddin

- Developed a FreeSurfer pipeline on an HPC cluster to extract 100,000 volumetric features in parallel from 500 patient MRI scans, enabling training of a random forest model for Alzheimer's disease classification.

- Visualized an ROI-map on an anatomically average brain template to highlight brain regions with significant features ($\alpha = 0.05$) for Alzheimer's classification with volumetric group mean z-score color coding.
- Fine-tuned the VGG16 convolutional neural network (CNN) with PyTorch for target identification in an autonomous surveillance robot capable of identifying, tracking, and following individuals.

NSF REU Intern - 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

- Designed an adaptive speed algorithm to reduce acceleration and braking in autonomous vehicles through intersections by up to 75.35%, minimizing fuel consumption and noise pollution.
- Created machine learning self-drive algorithms with DBSCAN, K-means, ROS, OpenCV, and Scikit-learn.
- Built a simulation using GazelleSim for autonomous intersection control testing in a controlled environment.

NSF REU Intern - 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

- Conducted prompt engineering and hyperparameter tuning with the OpenAI API on scientific claim verification with Python.
- Increased the size of our project corpus by over 200% to improve benchmarking the effectiveness of the GPT-3.5-turbo model's ability to generalize to multiple scientific news domains.
- Calculated the precision, recall, and F1 score on zero-shot classification with the GPT-3.5-turbo model against our dataset on two sub-tasks: stance labeling and identifying sentence rationales.

PROFESSIONAL EXPERIENCE

Junior Web Developer

Dec 2021-June 2022

Hard to Find Party Supplies

- Optimized legacy inventory processes with the use of Cron Jobs to save 30 minutes of work time per week.
- Maintained \$1m/year eCommerce platform by performing server maintenance, writing documentation, designing web page features, managing Google AD campaigns and updating inventory of 35,000 products.
- Ported XML web page modifications from PHP to TWIG during a full server rework with the MVC design pattern.

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

College of Sciences Dean's List – Old Dominion University

Dec 2023-May 2025

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