Michael Evans

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EDUCATION

Old Dominion University, Norfolk, VA, United States

Sept 2023-May 2025

May 2021-May 2023

Bachelor of Science in Computer Science

GPA: 3.92/4.00

Tidewater Community College, Portsmouth, VA, United States

Associate of Science in Computer Science Associate of Science in Business Administration

May 2017-May 2019

GPA: 3.96/4.00

PUBLICATIONS

Conference Proceedings

Michael Evans, Dominik Soós, Ethan Landers, and Jian Wu. 2023. MSVEC: A Multidomain Testing Dataset for Scientific Claim Verification. In *The Twenty-fourth International Symposium on Theory, Algorithmic Foundations, and Protocol Design for Mobile Networks and Mobile Computing (MobiHoc '23), October 23–26, 2023, Washington, DC, USA.* ACM, New York, NY, USA, 6 pages. https://doi.org/10.1145/3565287.3617630 [Paper]

Preprints

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. 2024. Vehicle-to-Everything (V2X) Communication: A Roadside Unit for Adaptive Intersection Control of Autonomous Electric Vehicles [ICRA 2025, in review] [Paper]

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. 2024. Developing, Analyzing, and Evaluating Self-Drive Algorithms Using Drive-by-Wire Autonomous Vehicles [ICRA 2025, in review] [Paper]

TALKS

Robust Lane Following with V2X Traffic Management

Research Experience for Undergraduates in Developing Self-Drive Algorithms for Electric Vehicles, Lawrence Technological University, 2024 (REU '24).

The Potential of Large Language Models in Evaluating Scientific Claims

Undergraduate Research Symposium; 2024 Mar 30; Norfolk, Virginia (VA): ODU Digital Commons (URS '24).

MSVEC: A Multidomain Testing Dataset for Scientific Claim Verification

The Twenty-fourth International Symposium on Theory, Algorithmic Foundations, and Protocol Design for Mobile Networks and Mobile Computing (MobiHoc '23).

Scientific News Verification With GPT

Research Experience for Undergraduates in Disinformation Detection and Analytics, Old Dominion University, 2023 (REU '23).

RESEARCH EXPERIENCE

Research Assistant

Sept 2024-Present

ODU Vision Lab, advised by Dr. Khan Iftekharuddin

• Applied transfer learning to the VGG16 convolutional neural network (CNN) for target identification with a surveillance robot capable of identifying, tracking, and following individuals with TensorFlow and Keras.

• Fine-tuned the motion planning algorithm in MATLAB for target following through tight, cluttered environments, enabling safe indoor operation previously limited to outdoor use.

NSF Research Intern - Developing Self-Drive Algorithms for Electric Vehicles

Lawrence Tech and Michigan State University, advised by Dr. Chung and Dr. Siegel

Computer Science & Artificial Intelligence Robotics Lab

- First-authored Vehicle-to-Everything (V2X) Communication: A Roadside Unit for Adaptive Intersection Control of Autonomous Electric 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 Research 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

- 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 build and maintain \$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 weekly.
- Revised XML web page modifications from PHP to TWIG during a complete server rework while utilizing the MVC design pattern, CSS, and HTML.
- Optimized legacy inventory processes with the use of CRON jobs to save 30 minutes of work time per week for current and future developers.
- Shaped the site Admin page by writing quality-of-life features for back-end users and setup network for secondary location during business expansion.

CERTIFICATIONS

CITI Program July 2023

Social and Behavioral Research - Basic/Refresher Social and Behavioral Responsible Conduct of Research Responsible Conduct of Research for Engineers

AWARDS

College of Sciences Dean's List – Old Dominion University BIO, GEO, CISE and OCE REU Travel Grant – \$1,200 Academic Excellence Award – Tidewater Community College Dec 2023-May 2024 Sept 2023 April 2020, Mar 2023

PROFESSIONAL SERVICE

Intelligent Ground Vehicle Competition (IGVC), Surveyor University Accountability Board, Member Association for Computing Machinery Group at ODU, Member STEM Day Expo, Wilson High School, Volunteer Exhibitor National Mathematics Honor Society at TCC (MA Θ), Member

Jun 2024 March-Aug 2024 Jan 2024-Present March 2019 Feb 2019-Present