Michael Evans (7)

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EDUCATION

Old Dominion University, Norfolk, VA, United States

Sept 2023-May 2025

Bachelor of Science in Computer Science Minor in Applied Mathematics

GPA: 3.9/4.0

Tidewater Community College, Portsmouth, VA, United States

Associate of Science in Computer Science Associate of Science in Business Administration May 2021-May 2023 May 2017-May 2019

GPA: 3.9/4.0

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

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 [In submission]

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 [In submission]

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

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

May-July 2024

• Worked on Vehicle-to-Everything (V2X) Communication: A Roadside Unit for Adaptive Intersection Control of Autonomous Electric Vehicles as the lead researcher and first author.

- Developed an adaptive speed algorithm to reduce vehicle idling, full stops, and pedestrian injuries, and incorporated robust lane-following algorithms for self-driving using ROS, OpenCV, and scikit-learn.
- Simulated our proposed solution in a complex figure-8 intersection environment using an in-house simulator, GazelleSim, and utilized rosboard for visualization of ROS topics and traffic light states.
- Designed 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

- Worked on MSVEC: A Multidomain Testing Dataset for Scientific Claim Verification as the lead researcher and first author.
- Contributed to the project corpus by expanding the multidomain testing dataset containing scientific claims from news articles with evidence papers from 56 to 200 discrete data objects for testing the effectiveness of the gpt-3.5-turbo model.
- Performed prompt engineering to solve the research problem of querying GPT for Sentence Rationales by experimenting with refining the language used in the existing query.
- Evaluated the performance of a zero-shot method with GPT-3.5 against the MSVEC dataset on two subtasks: stance labeling and identifying sentence rationales. Compared the capabilities of GPT on the task of scientific claim verification against several domain-specific datasets for training models.

INDUSTRY EXPERIENCE

Hard to Find Party Supplies

Junior PHP Web Developer

Dec 2021-June 2022

- Worked closely 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.
- Re-wrote XML web page modifications from PHP to TWIG during 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.
- Improved 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

COMMUNITY INVOLVEMENT

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 2024-Present Jan 2024-Present March 2019 Feb 2019-Present