

Shawhin Talebi

shawhintalebi@gmail.com | 972.757.8686

Website: <https://shawhint.github.io/> | LinkedIn: <https://www.linkedin.com/in/shawhintalebi/>

EDUCATION

The University of Texas at Dallas

PhD, Physics

Anticipated May 2022

GPA 3.77

The University of Texas at Dallas

M.S., Physics

December 2019

GPA 3.82

The University of Texas at Dallas

B.S., Physics

May 2017

GPA 3.52

TECHNICAL SKILLS

Tools: Python, MATLAB, SQL, Excel, Keynote, bash/zsh, GitHub

Certifications: Data Structure & Algorithms (Udemy), Tableau (Udemy)

WORK EXPERIENCE

Research Assistant

December 2018 - Present

The University of Texas at Dallas (Department of Physics) - Richardson, Texas

- Orchestrated multiple team projects focused on deployment of a real time **Python** based biometrics application, unveiling immediate insights that were previously inaccessible
- Developed empirical machine learning model to predict pupil size from full spectrum of visible light using **MATLAB**, which lead to first author publication and outperformed all previous studies
- Presented research at university poster competition, which resulted in 3rd place award

Business/IT Manager

May 2017 - December 2018

Palomino Motors - Dallas, Texas

- Analyzed marketing and sales reports to inform inventory acquisition, which resulted in a 50% decrease in average inventory age
- Evaluated costs of lead providers through close rate analysis, which led to over \$2500 in monthly savings

TALKS & OUTREACH

Guest Lecture: Dimensionality Reduction - Big Data and Machine Learning for Scientific Discovery (PHYS 5336), Spring 2021

Guest Lecture: Fourier and Wavelet Transforms - Scientific Computing (PHYS 5315), Fall 2020

A Brief Introduction to Optimization - GSP Seminar, Fall 2019

Mad Scientist Series - The Heights Church, Fall 2019

Weeks of Welcome Poster Competition - UTD, Fall 2019

A Brief Introduction to Networks - GSP Seminar, Spring 2019

Modeling Autonomic Pupillary Responses from External Stimuli Using Machine Learning - GSP Seminar, Spring 2019

PUBLICATIONS

- Talebi S.**, Lary D.J., Wijeratne L. OH., and Lary, T. Modeling Autonomic Pupillary Responses from External Stimuli Using Machine Learning (2019). DOI: [10.26717/BJSTR.2019.20.003446](https://doi.org/10.26717/BJSTR.2019.20.003446)
- Wijeratne, L.O.; Kiv, D.R.; Aker, A.R.; **Talebi, S.**; Lary, D.J. Using Machine Learning for the Calibration of Airborne Particulate Sensors. *Sensors* 2020, 20, 99.
- Lary, D.J.; Schaefer, D.; Waczak, J.; Aker, A.; Barbosa, A.; Wijeratne, L.O.; **Talebi, S.**; Fernando, B.; Sadler, J.; Lary, T.; Lary, M.D. Autonomous Learning of New Environments With a Robotic Team Employing Hyper-Spectral Remote Sensing, Comprehensive In-Situ Sensing and Machine Learning. Preprints 2021, 2021020454 (doi: 10.20944/preprints202102.0454.v1).

AWARDS AND HONORS

2nd Annual Weeks of Welcome Poster Competition – 3rd Place Winner

August 2019

Outstanding Undergraduate Student – Nominee

April 2017

Student Leader of the Year – Nominee

April 2017