Michael A. Bittar

US Citizen

Education

Houston, TX **University of Houston** **Spring 2020-Fall 2020**

- M.S.E in Electrical and Computer Engineering, Fall 2020. GPA: 3.7
- Relevant Coursework: Machine Learning, Computer Vision, Data Mining, Big Data, Advanced Electromagnetic Waves, Engineering Analysis Electromagnetic Waves, Applied Electricity and Magnetism, Microwave Engineering, Antenna Engineering, Complex Analysis, Linear Algebra, Differential Equations, Control Systems
- Masters Thesis: Study on Reinforcement Learning Deep Q-Network Algorithm

Houston, TX **University of Houston** **Fall 2015-Spring 2019**

- B.S.E in Electrical and Computer Engineering, Spring 2019. In-Major GPA: 3.5

Employment

University Teaching Assistant for Data Structures **Spring 2020 - Fall 2020**

- Teaching Assistant for the undergraduate course Data Structures in which I helped assist students with their understanding of Data Structures and Algorithms

University Teaching Assistant for Electronics **Fall 2018 - Spring 2019**

- Teaching Assistant for the junior level course Electronics in which I helped assist students with their understanding of the fundamentals of Electronic Circuits.

University Teaching Assistant for MATLAB **Fall 2016 - Spring 2018**

- Teaching Assistant for the sophomore level course MATLAB for Engineers in which I helped assist students in their understanding of basic algorithms and problem-solving skills.

Data Scientist Intern - Baker Hughes GE **Summer 2018**

- Data Scientist and Engineering intern for Baker Hughes GE. Worked on integrating Data Analytical skills to assist in an algorithm that can predict the inclination angle of the drilling tool in a well at the drill-bit using the data from the motor.
- Algorithm written in Python and is being implemented to the drill-bit technology to have the data stored in a database.

University of Houston Electromagnetic Well Logging Research Assistant **Summer 2017**

- Research on understanding Deep Reading Resistivity Tool responses in multi-layer media. Simulated Deep Reading Resistivity responses using 1D Fast Modeling code. Developed a Python code that can generate geo-steering signals in desired formations for any industry deep reading resistivity tools.

Additional Experience

- Presented at the SPWLA Resistivity Rt-SIG Fall 2017 Conference in front of industry professionals about the topic of Deep Reading Resistivity Tools and their responses in different media.
- Presented at the University of Houston Electromagnetic Consortium about the topic of Deep Reading Resistivity.
- Presented at the Fall 2020 SEG Conference giving a talk about the topic of utilizing Deep Reinforcement Learning algorithms to solve Oil and Gas depth matching problem

Core Technical Skills

- Languages: Python, MATLAB, R, C, C++, node.JS Solidity
- Software: PyTorch TensorFlow, scikit-learn, Jupyter-lab, VS Code, Microsoft Office