George Mihaila

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Data Science - Machine Learning - Software Engineer

Employment

Data Scientist, Intern

State Farm - Enterprise Data & Analytics

May 2020 – July 2020

- Created a proof of concept (POC) application for stock portfolio optimization using Reinforcement Learning (RL) in Python.
- Helped create a POC application that optimizes claims automatic payment process using RL in Python.
- Built a RL framework tool that makes it transferable in different business areas to help create RL environments and models.

Data Scientist

University of North Texas

September 2018 – May 2020

- Provided data science and Machine Learning (ML) consultation for multiple research labs in Computer Science to help with efforts such as implementing research papers using python, troubleshooting Deep Learning (DL) models written in python.
- Helped maintain latest ML and DL frameworks for University of North Texas (UNT) High Performance Computing (HPC).
- Created workshops and tutorials that teaches UNT professors and students in the research area how to use cloud computing HPC services: build and train large DL models on multiple compute nodes with big data.

Machine Learning Engineer

State Farm - Enterprise Data & Analytics

May 2019 – July 2019

- Automated modeling evaluation in python that can build and train baseline models and compare them against a target model that can help reduce deployment timeline by 90%.
- Wrote and published a python package for automatic model evaluation that can be used across different departments.
- Built python program that generates a HTML report showing evaluation and data analysis plots of the baseline model that can be integrated in a CI/CD pipeline.

Data Scientist, Intern

State Farm - Enterprise Data & Analytics

May 2018 – August 2018

- Used Natural Language Process (NLP) tools in python to extract meaningful features from claims text data that were used in addition to existing claims feature to increase model baseline performance in predicting claims duration.
- Created a tutorial on how to use to GPU to greatly reduce DL models training time in python.
- Built an Optical Character Recognition DL model from scratch using python. Learned how to use bi-directional recurrent neural networks along with a custom loss function and developed a training strategy that produced high accuracy.

Teaching Assistant

University of North Texas

September 2020 – Present September 2017 – May 2018

- Building and debugg C/C++ coding assignments and help coordinate coding exams.
- Peer mentor and grader for students in Computer Science basic and advance courses.

Machine Learning Researcher

University of North Texas

January 2017 – Present

- Implement concepts in python from research papers related to NLP with focus on text generative models.
- Building state of the art DL models in python to generate casual dialogue conversation that can mimic a persona.
- Dealing with large dialogue data from movies and TV series. Using most common characters as target personas for training.

Education

Denton, TX University of North Texas

January 2017 – Present

- PhD in Computer Science, December 2019 Present
 Focus on NLP, companionable robots, persona generated dialogue and chatbots.
- M.S.E in Computer Science, December 2019
 Specialized in ML, DL, NLP, Big Data, Data Mining, Computer Vision and Deep RL.

Skills

Proficient	Need warmup proficient	Intermediate
Python, Tensorflow, PyTorch	Java, C, C++, Matlab, R	SQL, Docker, AWS, Swift, Android, Hadoop,
		HTML