Atefeh Mahdavi

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SUMMARY

A Ph.D. student focused in the field of machine learning. Strong statistical background with ability to collect, analyze and disseminate large volumes of data with attention to detail, accuracy, and data quality.

Authorized to Work in the United States (No need for sponsorship)

EDUCATION

Florida Institute of Technology   Melbourne, FL, USA
Doctorate of Philosophy, Computer Science   August 2018 – Present, GPA: 3.93/4.0
Dissertation: A neural network-based algorithm for open set recognition

Florida Institute of Technology   Melbourne, FL, USA
Master of Science, Computer Science   August 2016 – May 2018, GPA: 4.0/4.0
Thesis: Distributed Coordination for Autonomous Guided Vehicles in Multi-agent Systems with Shared Resources

WORK EXPERIENCE

Graduate Research Assistant   August 2018 – Present
L3Harris Institute for Assured Information https://research.fit.edu/l3hiai/people/
- Developing a deep neural network-based algorithm to detect and classify both known and unknown classes.
- A research focused on distributed coordination of multi-agent systems.
- Designing centralized and decentralized frameworks to find a set of optimal and conflict-free paths and coordinate the behavior of a number of agents in distributed multi-agent systems.

Graduate Teaching Assistant   August 2016 – May 2018
Florida Institute of Technology
- Network Security (CSE5636).
- Computer Networks (CSE5231).

TECHNICAL SKILLS

- Programming: Python, MATLAB, Java, C++
- Analytics Libraries: SciPy, NumPy, Scikit-Learn, Pandas, TensorFlow, Keras, Matplotlib, Seaborn
- Analyzing data set and implementing machine learning models such as deep neural networks, regressions, decision trees, genetics algorithm
- Experience with Microsoft Excel, PowerPoint and Word
- Areas of expertise include:
  - Maximum Likelihood Estimation
  - Kernel Density Estimation
  - Multinomial Regression
  - Outlier Detection
  - Linear and Non-Linear Modeling
  - Principle Component Analysis
  - Hyperparameter Tuning
  - Regularization and Optimization

PUBLICATIONS

Google Scholar https://scholar.google.com/citations?user=1lHR9n8AAAAJ&hl=en
- "A Survey on Open Set Recognition" published in AIKE conference.
- "Distributed Coordination of Autonomous Guided Vehicles in Multi-agent Systems with Shared Resources" published in IEEE, Southeast conference, Spring 2019.
- "Optimal Trajectory and Schedule Planning for Autonomous Guided Vehicles in Flexible Manufacturing System" published in IRC conference, Spring 2018.
- "Automated designing of digital integrated circuits by genetic algorithm" in the 2nd National Electrical Engineering Conference dated 24 & 25 February 2010 by Najaf Abad Azad university"
- "Introducing a new tool for designing digital integrated circuits" published in the 2nd Conference of Electrical & Electronics Engineering dated 19 & 20 August 2009 by Gonabad Azad University.

HONORS AND AWARDS

- Outstanding Graduate Student at Florida Institute of Technology – Spring 2019 and Spring 2020.
- Research and Teaching Assistantship Award – Florida Institute of Technology – August 2016 – Present

COURSES

Machine Learning - Pattern Recognition - Nonlinear Optimization - Advanced Machine Vision - Theory of Neural Networks - Neural Networks and Deep Learning - Convolutional Neural networks – Big Data Visualization - Analysis of Algorithm