Mahtab Masoudi Nezhad

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**Education**

West Virginia University, *Morgantown, WV*

Master of Science in Computer Science

Master of Science in Agriculture, Natural Resources, and Design

Amirkabir University of Technology, *Tehran, Iran*

Bachelor of Science in Textiles Engineering

**Academic Projects**

“Database management for entrepreneurship center at WVU” Summer 2024

* Developed a SharePoint site integrated with Microsoft Office apps to streamline the collection and analysis of client information, enhancing data management and accessibility.

“Classification and segmentation of apparel using Convolutional Neural Networks” Spring 2024

* Generated a new dataset using Generative Adversarial Network. Employing an apparel sewing pattern dataset along with corresponding 3D images using SciKit, TensorFlow, Keras libraries.
* Utilizing ResNet50 to fine-tune the model, enhancing its performance and accuracy.

“Regional Predictions of COVID-19 Rates Based on Twitter Data” Fall 2023

Coursework: Big Data Engineering

* Cleaning and preprocessing a diverse tweet dataset using Numpy, Pandas, Matplotlib libraries
* Experimenting with various combinations of keywords within tweets to optimize prediction accuracy for COVID-19 cases in different states.

“Multi-sensory evaluation of textile haptics” Spring 2023

Coursework: Statistical Methods

* Collecting, arranging, and entering data into consumer neuroscience software for unpacking human behavior. Used biosensors and eye tracking devices for this study.

“Biodegradation of 3D-printed composites” Fall 2022

* Performing experiment on biodegradation of different blends of cotton and PLA.
* Researching and gathering information on standards required for the experiment.

“In-situ synthesis of zinc oxide nanoparticles on cotton fabrics” Fall-Spring 2018

* Evaluating mechanical and chemical properties of each blend to optimize the functionality.
* Researching and gathering information on standards required for the experiment.

**Work Experience**

**Machine Learning Internship** Summer 2024

*WVCTSI*, Morgantown, WV

* Conduct research and analyze data sets using machine learning techniques in SparkSQL and Python to identify patterns, trends, and insights for public health and clinical studies.

**Graduate Assistant** August 2022-2024

*WVU*, Morgantown, WV

* Managing a team of 10 student workers on SharePoint and Starrez systems.
* Grading assignments and supporting faculty with research in consumer neuroscience.

**Quality Control Inspector**  September 2020-2022

*LC Waikiki*, Tehran, Iran

* Trained newly hired employees by explaining company procedures, job duties and performance expectations.
* Wrote detailed reports outlining performance, quality, and defect rates.

**Certification and Professional Affiliation**

Human Subject Research, CITI Training for Biomedical Research Investigators 2025

XRD SEM Cleanroom Training 2024

Machine Learning Certification 2023

Hazard Communication, Laboratory Safety, and Hazardous Waste 2022

**Skills**

**Programming Languages and Frameworks:** Python, SQL, React, JavaScript, HTML

**Software Knowledge:** Clo3d, Lectra/Gerber, Gemini, Catia, Solidworks, Autodesk Fusion, Figma, PLM SAP, GIS

**Abilities:** Data Analysis using JMP, Minitab, R - Perform textile standard tests such as mass spectrometry test (GCMS)  
**Languages:** English and Persian

**Portfolio**: [https://Mahtabmasoudi.github.io/portfolio](https://Mahtabmasoudi.github.io/portfolioG) **GitHub**: <https://github.com/Mahtabmasoudi>