

# Mina Akhondzadeh

## Data Scientist

Phone: (412) 499-2523  
Email: [mina.akhondzadeh@ucf.edu](mailto:mina.akhondzadeh@ucf.edu)  
LinkedIn: [@mina-akhondzadeh](https://www.linkedin.com/in/@mina-akhondzadeh)  
Portfolio: [mina-ak1.github.io/portfolio-rep](https://mina-ak1.github.io/portfolio-rep)

PhD student in Big Data Analytics at UCF with a 4.0 GPA and hands-on experience in AI-driven business risk modeling, credit scoring, and NLP. Industry experience includes developing explainable neural network models and large language model fine-tuning. Technical expertise spans Python, R, SQL, AWS, and advanced statistical methods. Completed a 9-month Dataquest Data Science program (2022) and multiple applied projects in credit risk, churn prediction, and text classification.

## EDUCATION

### PhD Big Data Analytics

University of Central Florida  
Orlando, FL 2023 – current

### MS Statistics and Data Science

University of Central Florida  
Orlando, FL 2023 – 2025  
GPA: 4.0/4.0

### MA Interior Architecture

Chatham University  
Pittsburgh, PA 2016 – 2018

### BS Aerospace Engineering

Sharif University of Technology  
Tehran, Iran 2010 – 2015

## SKILLS

Certifications:

**AWS Certified Cloud Practitioner**

Programming Languages & Tools:

- Python (NumPy, Pandas, Matplotlib, Scikit-learn, PyTorch, TensorFlow)
- R (Tidyverse, ggplot, Caret)
- SQL
- Excel, Power BI, Spark

Machine Learning & Data Analysis:

- Supervised & Unsupervised Learning
- NLP (Transformer Models, Large Language Models (LLMs))
- Deep Learning (Neural Networks, Attention Mechanisms)
- Model Fine-Tuning (BERT, LLaMA)
- LLM Frameworks: HuggingFace
- Exploratory Data Analysis
- Hypothesis Testing, ANOVA

## WORK EXPERIENCE

Worth AI

Orlando, FL | Summer 2024

### Data Scientist Intern

Investigated the impact of missing values on business credit scores and developed neural network models for prediction. Diagnosed reasons for high scores in data with over 60% missing values and proposed solutions. Compared SHAP and Integrated Gradients for explainability and used AWS Athena with SQL for data querying.

University of Central Florida

Orlando, FL | Fall 2023

### Graduate Teaching Assistant

Assisted Statistical Methods students with fundamentals like descriptive statistics, sampling distributions, probability, and hypothesis testing.

Tri-State Office Furniture Inc.

Pittsburgh, PA | 2021-2022

### Design Director

Led a team of 5 designers, ensuring project profitability and exceeding design expectations, while collaborating with 3 other departments.

Tri-State Office Furniture Inc.

Pittsburgh, PA | 2018-2021

### Interior Designer

Executed design-to-installation for 150+ projects, using 3D modeling.

## PROJECTS

- **Feed Forward Neural Network for Business Credit Score Prediction (Internship)**  
Applied a Feed Forward Neural Network to predict business credit scores using financial, social, and economic data. Utilized SHAP and Integrated Gradients for model explainability, compared their algorithms and performance. (Python)
- **KNN for Pseudo Business Score Development (Internship)**  
Developed a pseudo business score using KNN on historical data grouped by industry to provide credit score ranges for potential SMB customers, promoting AI-powered underwriting solutions to enhance financial profiles and loan eligibility. (Python)
- **K-Means Clustering for Churn Prediction**  
Performed K-Means Clustering on credit card data for churn prediction, determining optimal clusters with WCSS. (Python)
- **Fine-tuning LLMs for Amazon Reviews Text Classification**  
Fine-tuned DistilBERT and trained a TF-IDF + logistic regression baseline to classify Amazon product reviews. Compared model accuracies, used t-SNE to visualize feature representations, and analyzed misclassified reviews to identify common errors. Examined attention weights to compare patterns between correctly classified and misclassified cases. (Python)

# Mina Akhondzadeh

Data Scientist

Phone: (412) 499-2523

Email: [mina.akhondzadeh@ucf.edu](mailto:mina.akhondzadeh@ucf.edu)

LinkedIn: [@mina-akhondzadeh](https://www.linkedin.com/in/@mina-akhondzadeh)

Portfolio: [mina-ak1.github.io/portfolio-rep](https://mina-ak1.github.io/portfolio-rep)

## COURSES

Data Preparation, Data Mining	(4/4)
Statistical Computing	(4/4)
Regression Analysis	(4/4)
Statistical Data Processing	(4/4)
Multivariate Statistical Methods	(4/4)

Theoretical Statistics	(4/4)
Experimental Design	(4/4)
Linear Algebra	
Algorithms: Design and Analysis	