

Highly analytical and detail-oriented professional with over 7 years of experience in machine learning, data analysis, software engineering, research, and automation; eager to leverage academic knowledge and technical proficiency in machine learning, data analysis, and generative AI with a keen commitment to ongoing learning in this dynamically evolving field. Possess a solid understanding of deep neural networks architecture, transformers architecture, statistical analysis, data manipulation and visualization techniques.

Education

Master's in Computer Science (GPA: 4.0/4.0)

Southern Illinois University,
Carbondale, IL, May 2017

Bachelor's in Computer Software Engineering

Azad University,
Qazvin, IR, Dec 2006

Tech Skills & Expertise

Programming Languages:

Python, SQL, Excel VBA, Java, R

Data Analysis:

ETL
Time Series techniques
Statistical Analysis
Visualization(Matplotlib, seaborn,
Tableau)

Generative AI:

LLM
Transformers
Fine Tuning
Evaluation
Prompt Engineering

Deep Learning Frameworks:

Tensorflow
PyTorch
Keras

Machine Learning Algorithms:

Supervised Learning
Unsupervised learning
NLP

Cloud Platforms:

AWS (EC2, DynamoDB, S3, Data
Lakes, SageMaker)

Version Control:

Git and GitHub
Jira

Publications

Fathi, Elnaz Jedari, Shahram Rahimi,
and Dunren Che 'Predicting Social
Network Check-in Locations: Noise
Impact Reduction for Classification.'
02.CATA.2018.1.1037: pages 62-68

Career Experience

Data Scientist

Jan 2024 — Current

Self-Employed, Leander, TX

Developed interactive dashboards and automated reports for Hill Country Community Ministry to identify trends, patterns, and insights to optimize food distributions.

- Cleaned and preprocessed raw data, ensuring accuracy and consistency for analysis .
- Utilized Excel VBA and Google sheets automation techniques to automate manual data tasks and reports enhancing accuracy and timelines.
- Delivered insightful statistical analyses of food demand and distribution patterns to optimize resource allocation.

Data Analyst

Sep 2020 — Mar 2023

Amdocs Inc., Remote

Led data analysis projects to support strategic business initiatives, for the prominent U.S. cellular telecommunications provider, driving revenue protection efforts, and improving operational efficiency. Created predictive models using machine learning algorithms to forecast sales, customer behavior, servers' failures during high-traffic times.

- Employed advanced SQL and Python techniques to analyze data and distill valuable insights.
- Generated ML models to predict revenue loss, promotions impact, and server overloads.
- Developed an automated data pre-processing solution reducing workload by 90%.
- Implemented time series forecasting models for promotional Impact analysis in the telecom industry, quantifying promotion effectiveness in driving revenue.
- Provided actionable insights analyzing server logs data preventing system failures during high-traffic times, achieving 30% enhancement in resource tolerance on Black Friday.
- Uncovered 15% revenue leaks by evaluating data trends.
- Streamlined multiple business analysis process, reduced task completion time from 8 hours to 5 seconds using optimized coding techniques.
- Created visualized reports and presentation for stack holders.
- Earned top-tier customer satisfaction through consistent excellence for two consecutive years.

Software Engineer

Apr 2017 —Aug 2020

Amdocs Inc., Champaign, IL

Delivered both Back-End and Front-End support for telecommunication industry CRM (Customer Relationship Management) and RIM (Retail Inventory Management) applications. Demonstrated DevOps and problem-solving skills in cross-functional bridge calls, and conducting root cause analysis for critical issues.

- Identified and resolved data errors affecting software performance utilizing advanced SQL, SPLUNK, and log data analysis techniques, leading to a 30% decrease in opened tickets.
- Diagnosed, debugged, and replicated problems from both business and application/code viewpoints, proposing and implementing corrective actions.
- Employed Java programming expertise to identify, diagnose, and rectify application bugs and failures, improving software performance.
- Ensured efficient operation of applications to meet diverse Service Level Agreements (SLAs) and critical metrics.

Other Skills

Project management:

Experience in managing and leading a team of 6 People to automate data preprocessing projects

Communication Skills:

Ability to convey complex technical concepts to non-technical stakeholders

Other:

Python Modular Programming
HTML/CSS
Linux
SPLUNK
Graphana
Dynatrace
Excel Macros/VBA
Google Sheets

Projects

Significant Wave Height Time Series Forecast:

A machine learning and data analysis solution to predict significant coastal wave height using time series analysis and XGBoost model training.

Text Summarizer End-to-End Project in Python:

Created a modular python application for a simple text summarizer ML application. Utilized VSCode and Git for modular programming.

Predicting Social Network Check-in Locations: Noise Impact Reduction for Classification:

Used R to create a Machine Learning model to predict the next check-in place based on places check-in history. Researched and developed a novel noise handling mechanism and improved the model performance significantly.

LangChain Small Project:

Created an application that receives the cuisine type of a restaurant (e.g., Iranian, Mexican, Italian) and suggests a name and menu items for it. using LLM and LangChain

Professional Certificates

- Building and Evaluating Advanced RAG Applications , [DeepLearningAI](#), 2024
- Building Machine Learning Pipelines in PySpark MLlib, [Coursera](#), 2024
- Introduction to Big Data with Spark and Hadoop, [Coursera](#), 2024
- Generative AI with Large Language Models (LLM), [Coursera](#), 2023
- ChatGPT Prompt Engineering for Developers, [DeepLearningAI](#), 2023
- AWS Cloud Technical Essentials, [Coursera](#), 2023
- Introduction to Designing Data Lakes on AWS, [Coursera](#), 2023
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization, [Coursera](#) 2023
- Advanced Learning Algorithms, [Coursera](#), 2023
- Supervised Machine Learning: Regression and Classification, [Coursera](#), 2023
- Unsupervised Learning, Recommenders, Reinforcement Learning, [Coursera](#), 2023
- Data Analysis with Python (IBM), [Coursera](#), 2023
- Structuring Machine Learning Projects, [Coursera](#), 2018
- Deep Neural Networks: Hyperparameter Tuning, Regularization & Optimization, [Coursera](#), 2018
- Neural Networks and Deep Learning, [Coursera](#), 2018

Other Career Experience

Virtualization System Administrator

2014 — 2016

Southern Illinois University, Carbondale, IL

- Administrated NETLAB+ virtual lab system
- Managed a multi-node VMWare cluster running vSphere and vCenter
- Implemented a vmWare cyber stadium to host SIU cyber defense mock competition in April 2015 & 2016.

Instructor

2015 —2017

Southern Illinois University, Carbondale, IL

Courses:

- Linux Essentials
- Network Protocols and Applications
- Information Storage and Management
- SQL Database

Graduate Teaching Assistant

2014 —2016

Southern Illinois University, Carbondale, IL

Courses:

- C#.NET programming
- Oracle/SQL
- Linux Administration and Programming

Network and Communication Consultant Engineer

2011 — 2012

Tarhe Ertebatat Inc., Iran

- Designed Local Area Network (LAN) for subway stations
- Designed Passenger Information Service (PIS) and Closed Circuit Television (CCTV) Location and Cabling Maps