CURRICULUM VITAE
Alireza Shiri

Prescott Hall, 1020 Stadium Dr.
Cookeville, Tennessee
United States 38505

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SUMMARY

A machine learning enthusiast with a deep understanding of algorithm creation, strong mathematics and statistical reasoning abilities, and practical expertise using exploratory and predictive machine learning techniques on huge, complicated datasets from the real world. I'm looking for challenging chances where I can put my abilities to work creating high-value automated systems, ensuring the deployment of reliable code, and picking up new skills in order to advance my professional growth.

RESEARCH INTERESTS

Machine Learning (NLP, NN)
Deep Learning (CNN)
Data Science
Optimization

SKILLS

Languages/Packages: Python, SQL; NumPy, SciPy, Seaborn, Pandas, Scikit-learn, TensorFlow, Keras
Operating Systems: Linux, Windows, Virtual Machines (VirtualBox, VMware Workstation)

EDUCATION

2021 – present	M.Sc. in Civil Engineering Tennessee Tech University Advisor: Dr. Daniel R. VandenBerge Thesis: A Practical Approach for Using Advanced Soil Constitutive Models by the Use of Parameters From Mohr-Coulomb Model	USA GPA: 3.59/4.00
2010 – 2014	B.Sc. in Mining Engineering University of Birjand Advisor: Dr. Gholamreza Nowrouzi Thesis: Facies Identification by Using Fractal Properties of Seismic Data	Iran GPA: 14.09/20.00

TOEFL & GRE

TOEFL iBT	**104/120** (Reading: **27**, Listening: **24**, Speaking: **24**, Writing: **29**)
GRE General	**318/340** (Verbal: **155**, Quantitative: **163**, Analytical Writing: **4.0/6.0**)

RESEARCH/WORK EXPERIENCE

2021 – present	Graduate Research Assistant at Tennessee Tech University
2015 – 2020	Geotechnical Lab Technician in Geo-Azmaye Shomal Construction Counseling & Geotechnical Lab.
2013	Training II – Geo-Azmaye Shomal Construction Counseling & Geotechnical Lab., Iran
2012 – 2013	Training I – BSc. Project in Farour A. Oil Field, Kish, Iran.
2011 – 2014	Programming Projects in Engineering Fields (Python, Matlab)

HONORS & AWARDS

2013	Awarded as the Top Research Student in University of Birjand
2012	Nominated and awarded as the Top Researcher in the 5th National Festival of Progress, Iran.

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PROFESSIONAL CERTIFICATES

Python Programming – University of Michigan
- Getting Started with Python
- Python Data Structures
- Using Python to Access Web Data

Machine Learning – Stanford University

IBM Machine Learning Professional Certificate
- Exploratory Data Analysis for Machine Learning
- Supervised Machine Learning: Regression
- Supervised Machine Learning: Classification
- Unsupervised Machine Learning
- Deep Learning and Reinforcement Learning
- Specialized Models: Time Series and Survival Analysis

IBM AI Engineering Professional Certificate
- Machine Learning with Python
- Introduction to Deep Learning & Neural Networks with Keras

Data Science: Foundations using R Specialization - Johns Hopkins University
- The Data Scientist's Toolbox
- R Programming

PUBLICATIONS

2023	**Shiri, Alireza.** VandenBerge, Daniel. Shiri, Yousef *"A Comparison of Approaches for the Determining the Virgin Compression Line of Remolded Saturated Soils"* in **Geo-Congress 2023 Los Angeles, California** (to be published in ASCE Library) - **submitted**
2021	Y. Shiri, **A. Shiri**, *"Discrete Fracture Network (DFN) Modelling of Fractured Reservoir Based on Geomechanical Restoration, a Case Study in the South of Iran"* in **The Mining-Geological-Petroleum Bulletin 36, no. 4 (2021): 151-162.**
2021	Y. Shiri, **A. Shiri**, *"Numerical Investigation of Fluid Flow Instabilities in Pore-scale with Heterogeneities in Permeability and Wettability"* in **The Mining-Geological-Petroleum Bulletin 36, no. 3 (2021): 143-156.**
2013	Y. Shiri, A. Moradzadeh, **A. Shiri**, and A. Chehrazi *"Gardner's Relationship and Regression Analysis for Prediction of P-Wave Velocity; Case Study, Fractured Dolomitic Limestone Reservoir, Farour.A Oil Field, Persian Gulf, Iran"* in **Journal of Petroleum Science and Technology, 31, no. 16 (2013): 1681-1686.**

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2012	Bamery Zeh Kelut, Mostafa. **Shiri**, **Alireza.** Dr. Javanshir Giv, Mohammad. *"Concrete and the Development Strategy Facts".* **The 1st National Conference of Concrete Industry**[1]
2011	**Shiri, Alireza.** Shiri, Yousef. Moradzadeh, Ali. Ghavami-Riabi, Reza. *"Monte Carlo Simulation and Stochastic Evaluation of Gas Reserve by Integration of 2D Seismic and Well Log Data".* **The 3rd International Petroleum Conference, Tehran University, Iran.**[2]
2011	Y. Shiri, A. Moradzadeh, **A. Shiri**, and A. Chehrazi *"Application of Adaptive Neuro-Fuzzy Inference System for Prediction of Porosity from Seismic Attributes; Case Study, Farour.A Oil Field, Persian Gulf, Iran"* in **Journal of Seismic Exploration 20, no. 2 (2011): 177-192.**

References available upon request.

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[1] https://www.civilica.com/Paper-NCCI01-NCCI01_100.html
[2] https://www.civilica.com/Paper-IPEC03-IPEC03_161.html