ALI TORABI

+1(949)738-3001 ⋄ atorabi@uwyo.edu

RESEARCH INTERESTS

- Machine Learning
- Deep Neural Networks & AutoML
- Optimization
- ExplainableAI

EDUCATION

University of Wyoming *Aug 2023- 2025(expected)*
Graduate Student, Computer Science
GPA: Distinction (4.0/4.0)
Advisor: Lars Kotthoff, Associate Prof. at University of Wyoming
Key Courses: Practical Machine Learning, Distributed Systems, Statistical Signal Processing

Islamic Azad University *Sep 2018-Feb 2021*
M.S., Software Engineering
GPA: Distinction (4.0/4.0)
Dissertation: Sub-Optimal Deep Neural Architecture Search Based On An Evolutionary Optimization Method
Advisor: Arash Sharifi, Assistant Prof. at SRBIAU
Key Courses: Neural Networks, Machine Learning(Elective), Distributed Systems, Advanced Algorithms, Parallel Processing, Advanced Database, Performance Evaluation of Computer Systems, Data Mining

Islamic Azad University *Sep 2005-July 2010*
B.S., Software Engineering
Dissertation: Comparison between Elliptic-curve security and Best RSA algorithms
Advisor: Koroush Manouchehri
Key Courses: Operating Systems, Artificial Intelligence, Database, Computer Architectures, Advanced Programming

LABS & RESEARCHES

Mallet Lab. *Aug 2023-*
developing techniques to selecting automatically machine learning algorithms with best parameters according to the specific problems.

Robotic Club. *Summer 2024*
Developing and implementation of Robotic Brains; Working on applying Machine Learning techniques on Robotics

SRBIAU Distributed Systems Lab. *Oct 2019-Jan 2020*
Working towards some of the aspects of Cloud Computing and Internet of Things (IoT). Our ultimate goal was building energy-efficient computing systems.

TEACHING EXPERIENCES

- Algorithm Design and Analysis, Spring 2024

- Algorithm Design and Analysis, Fall 2023

- Computer Systems Performance Evaluation, Fall 2019

- Advanced Database, Spring 2019

- Advanced Algorithms, Fall 2018

- Parallel Processing, Fall 2018

- Principles of Compiler Design, Spring 2008

INDUSTRIAL EXPERIENCES

Freelancer   April 2020 - Present
Senior iO SDeveloper   *Teh, IRAN*

· Implementing and developing a bunch of iOS apps ordered by customers. Making some apps (with central capability to do machine learning functionality) for some corporations.
· Working with a team of programmers and designers Building awe-inspriring iOS apps mostly on ML chips My main responsibilities are making Deep CNN models for recognizing and predicting product images and fill the descriptions accordingly, playing the main role in designing and architecting apps layouts and logics, making sure that apps will be run seamlessly across all iOS devices including watchOS
·

IRANSAMANEHCO.   May 2018 - April 2020
Senior iOS Developer   *Teh, IRAN*

· Mainly focused on making news apps and preparing the apps to respond promptly My focused were: Designing new apps, implementing new updates and fixing bugs, renovating older apps written in Objective-C to latest Swift version, maintaining the code and publish apps on App Store and, using Reactive Programming paradigms like RxSwift to get news streams continuously.

HOOSH O DANESH SEPEHR CO.   Nov 2016 - April 2018
iOS Developer   *Teh, IRAN*

· Implementing two apps for online groceries. My responsibilities was to design high demanding apps for retailers. Leveraging many of iOS frameworks and monitoring the performance and bug fixing. Also, working closely with the team of graphics and back-end.

HOOSH O DANESH SEPEHR CO.   Nov 2014 - Nov 2016
C # Programmer   *Teh, IRAN*

· Working with the team to develop and support desktop apps based on C#.Net. My responsibilities was debugging and maintaining written code, writing SQL queries and server maintenance, creating reports and working with RSS packages and, improving the procedures and queries to better quality.

OIEC GROUP   Apr 2012 - Oct 2014
Internship - C# programmer   *Teh, IRAN*

· Working as an Intern at first and learning some useful concepts like advanced OOP, manipulating Tables and Queries in SQL Server Database, designing UI for Webforms.

HONORS & AWARDS

- Rank of 47 in nationwide university entrance examination for IAU

- Invited participant for Evand iOS Workshop - November 2018

- Invited participant for Symposium of startup companies in Islamic Republic of Iran Broadcasting - April 2017

- Participant in preparing for National Olympiad in Informatics, 2003.

PUBLICATIONS

- Ali Torabi, Arash Sharifi, Mohammad Teshnehlab. Using Cartesian Genetic Programming Approach with New Crossover Technique to Design Convolutional Neural Networks [*Springer, Neural Processing Letters*]

- Ali Torabi, Arash Sharifi, Mohammad Teshnehlab. A New Crossover Technique for Cartesian Genetic Programming based on Population Alignment [*International Journal of Bio-Inspired Computation, Under Review*]

- Soudabeh Bolouri, Ali Torabi, Farshad Ghrobani, Diksha Shukla. A Secure User Authentication Model Utilizing EEG Brain Responses to Incongruent Stimuli. [*IEEE International Joint Conference on Biometrics (IJCB 2024), Under Review*]

PROGRAMMING SKILLS

Machine Learning	Python, Scikit-learn with PyCharm IDE.
Swift, Objective-C	XCode
Deep Learning	PyCharm, Google Colab.
C#	Microsoft Visual Studio
SQL	Microsoft SQL Server
ASP.Net, HTML, CSS, Javascrip	VS Code
Data Visualisation	Glueviz, Tableau
Java	Android Studio
Big Data	Apache Hadoop, MongoDB

TECHNICAL STRENGTHS

Typesetting Document	Latex
UI and Visual Design	Adobe illustrator, Microsoft Visio
Microsoft 365	Word, Excel, Power Point
iWork (Mac OS)	Pages, Numbers, Keynote

CERTIFICATES

2014	OOP Concepts	Tehran Institute of Technology
2014	Social Networks	Coursera, Michigan University
2014	Introduction to Guitar	Coursera, Berklee College of Music
2013	Introduction to Logic	Coursera, Stanford University

LANGUAGES

- English: Fluent

- Persian: Native

OTHER ACTIVITIES & HOBBIES

- Participating in Some Local GoKart Races and Schools

- Playing Guitar and Harmonica for almost 10 Years