Yasin Danesh

((+98) 910-117-1347 **≥** yasinyasin.1381@gmail.com **○** github.com/Orgonah **m** www.linkedin.com/in/yasin-danesh

EDUCATION

Isfahan University of Technology, Isfahan, Iran

Bachelor of Computer Engineering (Score: 17.66/20)

Oct. 2021 - Expected Sep. 2025

• Relevant Coursework: Artificial Intelligence, ML, Deep Learning, Computer Vision, Data Structures & Algorithms, Linear Algebra, Database, Engineering Probability and Statistics, IT Project & Strategic Management

Professional experiences

Internship at Payampardaz - Isfahan, Iran

Jul. 2024 - Sep. 2024

• Payampardaz is a network company specializing in innovative network solutions. During my internship, I focused on researching and implementing AI in SD-WAN. I developed machine learning models for fault management using the company's datasets to predict and identify faults and improve network reliability and performance.

Neural Network Summer Camp at Isfahan University

Jul. 2024 - Sep. 2024

• During this university summer camp, we gained practical experience with neural networks (DNN, CNN, RNN). Using TensorFlow and PyTorch, we coded various projects to help us deepen our understanding of deep learning concepts and their applications. These hands-on skills let us apply theoretical knowledge to real-world problems.

Chairman of AICup Contest

Feb. 2023 - Sep. 2023

• Led an AI coding contest with more than 1000 contestants, where AI algorithms competed in problem-solving and competitive programming. Developed challenging problems and scenarios to promote innovation and technical excellence. Integrated AI frameworks to support participants in developing their algorithms.

TEACHING & RESEARCH ASSISTANT

Network Security & Encryption

Sep. 2024 - Jan. 2025

Designed materials, evaluated student work and helped students grasp encryption and network security concepts.

Data Structures & Algorithms

Oct. 2023 - Jan. 2025

• Crafted assignments, evaluated student work and facilitated comprehension of complex topics for three semesters.

Basic & Advanced Programming

Oct. 2022 - Jan. 2025

Designed projects, assessed assignments, and helped students master programming concepts over five semesters.

Data Compression & AI Applications

Mar. 2023 - May. 2023

Researched data compression methods and their AI applications, culminating in a presentation of findings.

PROJECTS

Handwriting Recognition Using CNN | Matlab, Python

Sep. 2024

Worked on digit detection using MATLAB, followed by developing CAPTCHA and handwriting recognition
models using CNNs, achieving strong results in pattern recognition and image classification.

Image Denoising Using Autoencoders | Matlab, Python

Aug. 2024

• Developed image denoising methods using a custom algorithm in Matlab and an autoencoder in TensorFlow. Focused on noise pattern analysis and unsupervised learning, enhancing skills in image processing and CNN.

Medical Detections with CNN | Matlab, Python

Jul. 2024

• Implemented blood vessel detection algorithms in MATLAB and developed a CNN model for COVID-19 detection. These projects achieved high accuracy showcasing the potential of DNN in healthcare applications.

Banking DBMS | SQL Server, Python

Mar. 2024

• Developed a DBMS in SQL Server to manage banking operations, optimizing transactions and balance inquiries. Designed database structure and created an interface for seamless customer transactions.

Ultimate Tic-Tac-Toe AI Game | Python, C++

Dec. 2023

• Built game logic and user interface using Python and C++, implementing Alpha-Beta Pruning to optimize AI decision-making. Integrated MCTS algorithm to further enhance AI strategy in complex game scenarios.

Network Cisco Configuration

Nov. 2023

 Developed a network simulation using Cisco Packet Tracer, configuring protocols such as RIP, EIGRP and OSPF to demonstrate effective network routing and management.

STM32 BAD USB Aug. 2023

• Developed a DIY USB Rubber Ducky using an STM32 ARM. The device emulates a keyboard for penetration testing, automating keystrokes to execute PowerShell commands and initiate a reverse shell within seconds.

OTHER ACTIVITIES

Paper: TINC-Plus, Improved TINC method on MLP Data Compression

Mar. 2025 - Present

Currently writing a paper on an enhanced tree-structured implicit neural compression for medical images.

Deep Learning & Machine Learning Courses by Andrew Ng

Nov. 2024 - Feb. 2025

• Completed self-paced learning on DNN, ML and RL concepts, algorithms, techniques, and applications.

Member, ICPC Country Contest Team

Apr. 2023 - May. 2023

• Represented the university in the ACM ICPC country contest, achieving 22nd rank.

Member, Computer Engineering Scientific Society Association

Dec. 2021 - Jan. 2023

Actively participated in organizing and managing workshops, seminars and events like ACM ICPC and CTF.

TECHNICAL SKILLS

Languages: C/C++, C#, Python, Matlab, SQL, HTML/CSS, JS, Verilog

Concepts: Machine Learning, Neural Networks, Reinforcement Learning, NLP, Generative AI, Image Processing, Data Compression, Database, FPGA, ARM, Encryption, Network Security, Operating Systems

SOFT SKILLS

Team Management: Proven ability to effectively lead and manage teams, leveraging experience from executive roles, volunteer work, and teaching assistantship. Adapting to new and challenging situations.

Initiative: Demonstrated initiative in taking on responsibility es and ensuring tasks are completed efficiently and effectively. Known for identifying opportunities for improvement and taking action to implement solutions.

Commitment: Dedicated and invested in achieving optimal results. Consistently put forth maximum effort and motivate others to do the same, ensuring high standards of performance and commitment to goals.

Self-Management: Skilled in managing time, resources, and priorities to ensure productivity and success, both individually and as part of a team. Adept at balancing multiple tasks and maintaining focus under pressure.