

# Shahrzad Shashaani

📍 Vienna, Austria    ✉ shahrzad.shashaani@gmail.com    🏠 Shahrzad Shashaani

🔗 <https://shahrzad-sh.github.io/Shahrzad-Shashaani.github.io/>    🌐 <https://github.com/Shahrzad-sh>

## Profile

I am a motivated computer scientist, who has experience in various Machine Learning and Deep Learning tasks. Based on different academic and professional projects, I gained valuable knowledge and experience in using different programming languages and useful frameworks that are essential for my interest domains. My specific research interests are Computer Vision and Recommender Systems, which my goal is to improve the results and add explainability to the employed Neural Networks. Therefore, I am interested in contributing to various kinds of projects in the fast-growing Artificial Intelligence field.

## Education

03/2024 – present Vienna, Austria	<b>PhD in Computer Science</b> <i>Technische Universität Wien</i> 🔗 <b>Thesis (initial) Title:</b> Explainability in Music Recommender Systems <b>Supervisor:</b> Peter Knees    🔗
09/2020 – 02/2023 Tehran, Iran	<b>Master of Science in Artificial Intelligence</b> <i>K. N. Toosi University of Technology</i> 🔗 <b>GPA:</b> 18.95/20, <i>First-Class Honours</i> <b>Thesis Title:</b> Using layer-wise training for Off-road Path Detection in Self-driving Cars <b>Supervisor:</b> Mohammad Teshnehlal    🔗
09/2016 – 09/2020 Tehran, Iran	<b>Bachelor of Science in Computer Engineering</b> <i>K. N. Toosi University of Technology</i> 🔗 <b>GPA:</b> 18.53/20, <i>Distinction</i> <b>Thesis Title:</b> Hospital Data Analysis Using Nonlinear Regression and Fuzzy Neural Networks <b>Supervisor:</b> Mohammad Teshnehlal    🔗

## Publications

P. Seshadri, **S. Shashaani**, P. Knees. "Enhancing Sequential Music Recommendation with Negative Feedback-informed Contrastive Learning." In *Proceedings of the 18th ACM Conference on Recommender Systems*, pp. 1028-1032. 2024.    🔗

**S. Shashaani**, "Explainability in Music Recommender System." In *Proceedings of the 18th ACM Conference on Recommender Systems*, pp. 1395-1401. 2024.    🔗

**S. Shashaani**, M. Teshnehlal, A. Khodadadian, T. Wick, and N. Noii. "Using layer-wise training for Road Semantic Segmentation in Autonomous Cars." *IEEE ACCESS* (2023), DOI: 10.1109/ACCESS.2023.3255988.    🔗

S. Lotfi, M. Modirrousta, **S. Shashaani**, M. Aliyari Shoorehdeli. "Network Intrusion Detection with Limited Labeled Data Using Self-supervision." *arXiv preprint arXiv:2209.03147*. (2022).    🔗

S. Mehralian, E. Jalaeian Zaferani, **S. Shashaani**, F. Kashefinishabouri, M. Teshnehlal, H. Ali Sokhandan, Z. Dibaji Forooshani, B. Montazer, Z. Joneidi, and M. Vafapeyvand. "Rapid COVID-19 Screening Based on the Blood Test using Artificial Intelligence Methods." *Journal of Control* 14, no. 5 (2021): 131-140.    🔗

## Teaching Experience

2021 – 2023	<b>Teaching Assistant</b> Neural Networks and Deep Learning, Artificial Intelligence Department, K. N. Toosi University of Technology <b>Lecturer:</b> Mohammad Teshnehlal    🔗
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## Professional Experience

10/2023 – present  
Vienna, Austria

### **Project Assistant**

FWF Project, Technische Universität Wien

#### **Main Experience**

- Learning different types of Recommender Systems
- Researching different concepts of Explainability
- Using Spotify Dataset and searching for other available Music Datasets that are suitable for Recommender Systems and Explainability
- Developing a Deep Learning Model with high recommendation performance and trying to generate meaningful explanations for the given recommendation

**Reference:** Peter Knees [↗](#)

01/2019 – 02/2023  
Tehran, Iran

### **Research Assistant**

K. N. Toosi ISLAB(Intelligent Systems Laboratory)

#### **Main Experience**

- Worked as a member of the COVID-19 diagnosis project
- Worked as a member of the path detection project

**Reference:** Mohammad Teshnehlab [↗](#)

12/2021 – 06/2022  
Tehran, Iran

### **Part-time Developer**

TelC International Communication Company [↗](#)

#### **Main Experience**

- Developing some parts of an existing database using MySQL
- Finding and extracting useful information from registered records
- Developing a simple recommender system for defined customer care app using Python

09/2020 – 12/2021  
Tehran, Iran

### **Team Member of SR2119 Social Robot Developing Project**

AICell Startup [↗](#)

#### **Main Experience**

- Machine Vision
  - Face Detection and Recognition
  - Face Tracking
  - Age-Gender Estimation

**Catalog Link:** SR2119 Robot [↗](#)

**Reference:** Sajjad Amini [s\_amini@sharif.edu]

06/2019 – 09/2019  
Tehran, Iran

### **Internship**

Assessment of Electronic Health Record System of Iran Health Organization, Iran  
Telecommunication Research Center(ITRC) [↗](#)

#### **Main Experience**

- Testing Electronic Health Record System (SEPAS)
- Developing Record Comparator Tool with Python

**Reference:** Mohammad Azadnia [azadnia@itrc.ac.ir]

06/2018 – 09/2018  
Tehran, Iran

### **Part-time Developer**

Android Application, Arena Group

#### **Main Experience**

- Developing Android Program for Students Curriculum Management

**Download Link:** Sakoo App [↗](#)

## Skills

### **Deep Learning Libraries and Frameworks**

Pytorch/ TensorFlow/ Keras

### **Programming Languages and Tools**

Python / MATLAB / Weka / C++

### **Machine Learning Libraries and Frameworks**

scikit-learn / OpenCV / Dlib / mediapipe

### **Other Libraries and Frameworks**

Numpy / Pandas / Matplotlib