Sarinasadat Hosseini

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LinkedIn/sarina

EDUCATION	**Ph.D in Computer Science**, Tokyo Institute of Technology	**2019/9-2022/9**
	M.S. in Computer Science, Tokyo Institute of Technology	**2018/4-2019/9**
	B.S. in Electrical Engineering, Shahid Beheshti University	**2012/9-2016/2**

JOB EXPERIENCES

Solution Architect/Data Analyst, Panasonic corporation — **2022/10-present**

- Developed a reporting system using Power BI and Python to generate insightful IoT analytics.
- Designed and developed a manufacturing process management system using Microsoft 365 products and Python, automating schedules and approval workflows to reduce errors and manual effort.
- Planned and supported the deployment of an LMS365-based e-learning system to enhance product knowledge; tracked learners' progress and exam results using BI dashboards, SQL and Python for advanced analysis.
- Contributed to IT requirements planning during a merger and acquisition project.
- Trained and mentored interns in data extraction, analysis, and report generation.

English Instructor, ESC — **2018/8-2021/8**

- Taught English to Japanese junior high school students.

RESEARCH

Research Assistant, EISESIV, Tokyo Institute of Technology — **2019/9–2022/9**
Supervised by Yoshihiro Miyake and Takayuki Nozawa

- Designed and developed an avatar-based job interview support system to reduce social anxiety and enhance candidate performance.
  - Created virtual interviewers using Unreal Engine, MetaHuman Creator, Live Link Face, and automated them using Unity, HTML, CSS and JavaScript.
  - Conducted behavioral analysis using Python libraries including OpenFace, Parselmouth, NeuroKit2, and NLTK.
- Developed a Google Meet extension that provided real-time feedback based on participants' verbal activity to improve communication in remote meetings.
  - Built the system using Python (OpenCV, Pandas, NumPy) and implemented active speaker detection with Scikit-learn and TensorFlow.
  - Conducted data analysis using Python (NumPy, Matplotlib) and R.
- Investigated dynamic smile variations in conversations to understand the role of different smile types in interpersonal communication.
  - Extracted facial features using Python and MediaPipe; classified smiles using SVM.

Research Student, Tokyo Institute of Technology — **2017/4–2019/9**
Supervised by Yoshihiro Miyake and Takayuki Nozawa

- Explored the effects of music as a meditative tool on emotion, communication, and collective creativity using fNIRS-based brain hyperscanning and body movement analysis.
  - Analyzed brain signals and performed hyperscanning in MATLAB; conducted data analysis using Python, SPSS, and R.

Research Intern, Tehran Province Water and Wastewater — **2015/6-2015/9**

- Developed an alarm system to monitor and regulate water purity levels.

SELECTED
PUBLICATIONS

[1] Avatar-Based Feedback in Job Interview Training Impacts Action Identities and Anxiety. **S. Hosseini**, J. Quan, X. Deng, Y. Miyake, T. Nozawa. In: *IEEE Transactions on Affective Computing*, 2024

[2] Unravelling the relation between altruistic cooperativeness trait, smiles, and cooperation: a mediation analysis. **X. Deng**, S. Hosseini, Y. Miyake, T. Nozawa. In: *frontier in Psychology*, 2023

[3] Encouragement of Turn-Taking by Real-Time Feedback Impacts Creative Idea Generation in Dyads. **S. Hosseini**, X. Deng, Y. Miyake, T. Nozawa. In: *IEEE Access*, 2021

[4] Head Movement Synchrony and Idea Generation Interference – Investigating Background Music Effects on Group Creativity. **S. Hosseini**, X. Deng, Y. Miyake, T. Nozawa.
In: *frontier in Psychology*, 2019

[5] Combined Effects of Background Music and Nonverbal Synchrony Measures on Group Creativity—A Multiple Regression Approach—. **S. Hosseini**, Y. Miyake, T. Nozawa.
In: *2019 IEEE International Conference on Systems, Man and Cybernetics (SMC)*, 2019

[6] Music Valence and Genre Influence Group Creativity. **S. Hosseini**, Y. Hattori, Y. Miyake, T. Nozawa. In: *HCII 2019*, **Best paper award**, 2019

LANGUAGES

English (*Advanced*), Japanese (*Advanced*), French (*Basic*), Korean (*Basic*), Persian (*Native*)

SKILLS

Data analysis: Python (NumPy, Pandas, TensorFlow, Keras, OpenFace, PySpark), MATLAB, R, SPSS, MySQL, Power Bi, Tableau

Cloud computing services: AWS, Salesforce

Object-oriented Languages: C#, Java

Web development: HTML, CSS, JavaScript

Software: Unreal Engine, Unity, Blender, ELAN

AWARDS

Japanese Government (MEXT) Scholarship   **2017/4-2022/9**
1800000 Yen/year.

Selected to present the Computer Science department's students   **2019/9**
during the graduation ceremony.
Tokyo Institute of Technology

Rank 1st out of 130 students in the Department of Control System and Engineering.   **2015**
Shahid Beheshti University