Amir Shirian

Machine Learning Researcher

Profile

Machine Learning engineer with 3+ years of experience solving real-world problems with machine learning approaches. I also have 6+ years of academia researching and proposing new methods, mentoring undergrad students, and collaborating with big companies.

Contact

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Portfolio
GitHub
LinkedIn

Work Experience

- **Machine Learning Intern**
  DeepMirror 2021
  Providing graph solutions for data scarcity cases in the biomedical data (images, molecules, RNA/DNA, and antibody)
- **Machine Learning Intern**
  Intel AI lab 2020
  Designing Learnable Graph Inception Network for Audio Representation Learning
- **Machine learning Engineer**
  Aramed Co. 2018
  Designing and implementing 3D foot Scanner to make foot orthosis for people with foot deficiencies
- **Head Member of R&D Group**
  Soha Co. 2016-2017
  Designing and implementing home automation systems based on IOT
  Designing and implementing Smart Passport Reader based on OCR

Education

- **PhD in Computer Science**
  University of Warwick 2019-Present
  Warwick Computer Science PhD students scholarship
- **M.Sc. in Electrical Engineering**
  University of Tehran 2015-2018
  Ranked in top 10% exceptional students

Academic Achievements

- Smart Grant 2022 Approved by UKRI
- ICME Reviewer in 2020-2022
- Elected Reviewer at First Graph ML Conference
- Part of the Doctoral Consortium at ICMI 2022
- Reviewer of Science Publishing Group, ML

Selected Publications

Shirian, Amir, Somandepalli, K., Sanchez, V., Guha, T. "Visually-aware Acoustic Event Detection using Heterogeneous Graphs" Interspeech (2022).

Ahmadian, M., Rahmani, S.**, Shirian**, **Amir**. "Future Image Prediction of Plantar Pressure During Gait Using Spatio-temporal Transformer" IEEE EMBC (2022).

Shirian, Amir, Somandepalli, K., and Guha, T. "Self-Supervised Graphs for Audio Representation Learning with Limited Labeled Data." IEEE Journal of Selected Topics in Signal Processing (2022).

Ahmadian, M, TH. Beheshti, M., Kalhor, A.**, Shirian**, **Amir**. "Unsupervised Generative Adversarial Network for Plantar Pressure Image-to-Image Translation." IEEE EMBC (2021).

Shirian, Amir, Subarna T., and Guha, T. "Dynamic Emotion Modeling with Learnable Graphs and Graph Inception Network." IEEE Transactions on Multimedia (2021).

Shirian, Amir, and Guha, T. "Compact Graph Architecture for Speech Emotion Recognition." ICASSP (2021).