

Ehsan PAJOUHESHGAR

EDUCATION

PRESENT	Ph.D in Computer Science Ecole Polytechnique Fédérale de Lausanne , Lausanne, Switzerland Image and Visual Representation Lab (IVRL) SUPERVISOR: Sabine Süsstrunk
SEPT. 2020	GPA: 5.85/6 (via 34 credits)
JULY 2020	B.Sc in Computer Engineering Sharif University of Technology , Tehran, Iran
SEPT. 2015	MAJOR: Software Engineering MINOR: Pure Mathematics GPA: 19.40/20 (via 166 credits)

PUBLICATIONS

Authors:	Ehsan Pajouheshgar*, Yitao Xu*, Tong Zhang, Sabine Süsstrunk
Title:	DyNCA: Real-time Dynamic Texture Synthesis Using Neural Cellular Automata
Conference:	Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2023
Authors:	Yael Vinker, Ehsan Pajouheshgar, Jessica Y Bo, Roman Christian Bachmann, Amit Haim Bermano, Daniel Cohen-Or, Amir Zamir, Ariel Shamir
Title:	Clipasso: Semantically-aware object sketching
Journal:	ACM Transactions on Graphics (TOG, SIGGRAPH) 2022
Authors:	Ehsan Pajouheshgar, Tong Zhang, Sabine Süsstrunk
Title:	Optimizing Latent Space Directions for GAN-Based Local Image Editing
Conference:	IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) 2022
Authors:	A. Khodadadi, A. Hosseini, Ehsan Pajouheshgar, F. Mansouri, & Hamid R. Rabiee
Title:	ChOracle: A Unified Statistical Framework for Churn Prediction
Journal:	IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE) 2020
Authors:	Ehsan Pajouheshgar, Christoph H. Lampert
Title:	Back to square one: probabilistic trajectory forecasting without bells and whistles
Conference:	Workshop on Modeling and Decision-Making in the Spatiotemporal Domain, 32 nd Conference on Neural Information Processing Systems, (NeurIPS) 2018

HONORS AND AWARDS

AUG. 2022	Best Paper Award from SIGGRAPH 2022 Conference
JULY 2020	Ranked in top 5 in terms of GPA among 126 B.Sc. Computer Engineering students of the Computer Engineering Department , 2015 beginners.
SEPT. 2019	Gold Medal in Iranian National Statistics Olympiad (Ranked 1st)
OCT. 2016	30th team among 2000+ teams in IEEEEXTREME Programming Competition
AUG. 2014	Gold Medal in 27 th Iranian National Physics Olympiad

WORK EXPERIENCE

- JULY 2020 | **Data Scientist, Cafe Bazaar**, Tehran, Iran.
Cafe Bazaar is by far the most popular app store among Iranians. I was working in the Computer Vision team in **Balad** (A map and navigation service like google maps).
My projects were focused on extracting information from our own
- MAY 2019 | KITTI-like Dataset, and extracting roads from satellite and aerial images.
- SEPT. 2017 | **Improving Recommendation System, Yektanet Online Advertising Platform**, Tehran, Iran
Yektanet is now one of the biggest online advertising platforms in Iran. Improving the recommendation system and designing an algorithm for
- JUNE 2017 | categorizing Persian text and Persian websites.

RESEARCH EXPERIENCES (+ SUMMER SCHOOLS)

- AUG. 2019 | **The Cornell, Maryland, Max Planck Pre-doctoral Research School**
Where: **Max Planck Institute For Informatics**, Saarbrücken, Germany
Outstanding undergraduate and master's students were invited to learn about cutting-edge research in computer science.
The curriculum included lectures and interaction with faculty from participating institutions.
- SEPT. 2018 | **Probabilistic Trajectory Forecasting, Computer Vision and Machine Learning Group, Institute of Science and Technology**, Vienna, Austria
I was working on trajectory forecasting problem, trying to predict the future of multi-modal trajectories based on a given initial segment. The idea was to use 3D-Convolutional Networks and probabilistic inference, to model the distribution of multi-modal trajectories.
- JULY. 2018 | **Project Adviser:** Prof. Christoph H. Lampert
- JULY. 2018 | **Sequence Generation, Machine Learning Labratory, Sharif University of Technology**, Tehran, Iran
I was working on generating sequences of discrete tokens using GANs. Discreteness tokens make backpropagation infeasible, hence I was training the GAN using Policy-Gradient and Reinforcement Learning techniques.
- MAY. 2018 | **Project Adviser:** Prof. M. Soleymani and E. Montahaei
- JAN. 2018 | **Churn Prediction Problem, Digital Media Laboratory, Sharif University of Technology**, Tehran, Iran
I was working on the Churn Prediction problem using recurrent neural networks and variational inference, trying to improve existing methods by adding a latent variable regarding users' loyalty.
- AUG. 2017 | **Project Adviser:** Prof. Hamid R. Rabiee and A. Khodadadi

