Omid Poursaeed

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Education

2015-Present Ph.D. Electrical and Computer Engineering, Cornell University & Cornell Tech, GPA: 4.18/4.3 Advisor: Professor Serge Belongie

> Courses: Advanced Topics in Machine Learning, Computer Vision, Machine Learning for Data Science, Statistical Inference and Decision, Natural Language Processing (Audited), Linear Programming, Real Analysis

2010–2015 **B.Sc.** Sharif University of Technology, Tehran, Iran (Graduated with honors)

MAJOR: Electrical Engineering, MINOR: Mathematics

2006-2010 Allameh Helli High School, Affiliated with the National Organization for Development of Exceptional Talents (NODET)

Research Interests

- Deep Learning
- Computer Vision

- Machine Learning
- Generative Models

Publications

- Neural Puppet: Generative Layered Cartoon Characters: WACV 2019, Omid Poursaeed, Vladimir Kim, Eli Shechtman, Jun Saito and Serge Belongie
- [2] Differential Privacy has Disparate Impact on Model Accuracy: NeurIPS 2019, Eugene Bagdasaryan, Omid Poursaeed, Vitaly Shmatikov
- Generative Adversarial Perturbations: CVPR 2018, Omid Poursaeed, Isay Katsman, Bicheng Gao and Serge Belongie
- Deep Fundamental Matrix Estimation without Correspondences: ECCV 2018, GMDLW, Omid Poursaeed*, Guandao Yang*, Aditya Prakash*, Hanging Jiang, Qiuren Fang, Bharath Hariharan, Serge Belongie. (*equal contribution)
- Stacked Generative Adversarial Networks: CVPR 2017. Xun Huang, Yixuan Li, Omid Poursaeed, John Hopcroft and Serge Belongie
- Vision-based Real Estate Price Estimation: Journal of Machine Vision and Applications, Omid Poursaeed, Tomas Matera and Serge Belongie
- Analytical studies of fragmented-spectrum multi-level OFDM-CDMA technique in cognitive radio networks: IEEE Ubiquitous Computing, Electronics & Mobile Communication Conference (2016),
 - Farhad Akhoundi, Saeed Sharifi-Malvajerdi, Omid Poursaeed and Jawad A. Salehi
- Cognitive-engined spectrum-fragmented synchronous MC-CDMA based on generalized hadamard codes: IEEE Wireless Communications and Networking Conference (WCNC 2015), M.H. Shoreh, M.J. Khojasteh, Omid Poursaeed and Jawad A. Salehi
- Resource allocation using fragmented-spectrum synchronous OFDM-CDMA in cognitive radio networks: IEEE Workshop on Communication and Information Theory (IWCIT 2014), Farhad Akhoondi, Omid Poursaeed and Jawad A. Salehi

Experience

- Summer 2019 Research Intern at Adobe Research with Vladimir Kim and Matthew Fisher
 - Fall 2019 Research Intern at **Facebook AI** with *Ser-Nam Lim*
- Summer 2018 Research Intern at Adobe Research with Vladimir Kim and Eli Schechtman
 - Template-based mesh deformation for 2.5D character animation
- Summer 2017 Research Intern at eBay Research with Shuai Zheng and Hadi Kiapour
 - Generative modeling of street-fashion imagery with stacked generative adversarial networks
- Winter 2016 Research Assistant at SE(3) Computer Vision Group at Cornell Tech with Professor Serge Present Belongie
- Summer 2013 Research Assistant at *Optical Networks Research Lab* with Professor Jawad Salehi (IEEE Fellow) Fall 2014

Honors and Awards

- 2019 Awarded **DLI Doctoral Fellowship** from Cornell Tech
- 2015 Awarded Jacobs Fellowship from Cornell University
- 2010 Ranked $\mathbf{12}^{th}$ among more than 277,000 participants in the Nationwide Entrance Exam of Universities
- 2010 Ranked $\mathbf{9}^{th}$ among more than 300,000 participants in the Azad University's Entrance Exam
- 2010-2014 Awarded Fellowship of the National Foundation of Elites
 - 2008 Nominated for Rouzbeh Prize by the Physics Society of Iran
 - 2008 Ranked 2^{nd} in the *Helli-Net* Programming Competitions
- 2003-2010 Member of the National Organization for Development of Exceptional Talents (NODET)

Professional Service

Reviewer for CVPR, ICCV, ECCV, AAAI, IEEE TPAMI, IEEE Transactions on Multimedia, IEEE Transactions on Industrial Electronics

Program Committee member for AAAI and CVPR Workshop on Adversarial Machine Learning

Patents

- [1] Generating a digital image using a generative adversarial network, with Shuai Zheng, Hadi Kiapour and Robinson Piramuthu
- [2] Object animation using Generative Neural Networks, with Vladimir Kim, Jun Saito and Eli Shechtman (pending)

Technical Skills

Programming Python, Pytorch, TensorFlow, Torch7, Chainer, BVLC Caffe, Theano (Lasagne, Keras), the scientific Python stack (numpy/scipy, scikit-learn, scikit-image, etc.), MATLAB, C/C++, HTML

Platforms Linux/UNIX, Amazon Web Services (AWS), Google Cloud Platform, Amazon Mechanical Turk

English Language Proficiency

TOEFL iBT: **112/120** - Reading: 30/30, Listening: 28/30, Speaking: 26/30, Writing: 28/30

GRE: Quantitative Reasoning: 170/170, Verbal Reasoning: 158/170