Hadi Mohaghegh Dolatabadi

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Research Interests

Normalizing Flows, Generative Modeling, Adversarial Machine Learning, Unsupervised Learning

Education

- **The University of Melbourne** — Melbourne, Australia
  Ph.D. in Computing and Information Systems — *June 2019 - Present*

- **Sharif University of Technology** — Tehran, Iran
  M.Sc. in Electrical Engineering. — *Sep. 2015 - Sep. 2017*
  - **GPA**: 18.89/20.0 (4.00/4.00)

- **The University of Tehran** — Tehran, Iran
  B.Sc. in Electrical Engineering. — *Sep. 2011 - Sep. 2015*
  - **GPA**: 18.33/20.0 (3.92/4.00)

Honors and Awards

- Accepted to *Machine Learning Summer School (MLSS) 2020* at the Max Planck Institute for Intelligent Systems, Tübingen, Germany (acceptance rate: 13.84%).
- Awarded a Graduate Research Scholarship to pursue Ph.D. at the University of Melbourne, Australia.
- Ranked 2$^{\text{nd}}$ among 33 Communication Systems students at Electrical Engineering Department, Sharif University of Technology, Tehran, Iran.
- Ranked 15$^{\text{th}}$ (top 0.2%) in the *Iranian Nationwide University Entrance Exam* for postgraduate studies in Communication Engineering.
- Recognized as the *Outstanding Talent* at University of Tehran and awarded admission to the M.Sc. program.
- Ranked 380$^{\text{th}}$ (top 0.15%) among more than 250,000 participants of the *Iranian Nationwide University Entrance Exam* for undergraduate studies.

Skills

Programming	Python (PyTorch, TensorFlow, OpenCV, SciPy, SkLearn), C, Linux, MATLAB
Languages	English (fluent, TOEFL iBT score of 113/120), Persian (native), Arabic (basic)

Publications

H. M. Dolatabadi, S. Erfani, and C. Leckie "AdvFlow: Inconspicuous Black-box Adversarial Attacks using Normalizing Flows," to appear in *the 34th Conference on Neural Information Processing Systems (NeurIPS)*, 2020. (Link)

H. M. Dolatabadi, S. Erfani, and C. Leckie "Black-box Adversarial Example Generation with Normalizing Flows," in *the ICML Workshop on Invertible Neural Networks, Normalizing Flows, and Explicit Likelihood Models*, 2020. (Link)

H. M. Dolatabadi, S. Erfani, and C. Leckie "Invertible Generative Modeling using Linear Rational Splines," in *Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics (AISTATS)*, pp. 4236-4246, 2020. (Link)

H. M. Dolatabadi and A. Amini, "Deterministic Design of Toeplitz Matrices with Small Coherence Based on Weyl Sums," *IEEE Signal Processing Letters*, vol. 26, no. 10, pp. 1501-1505, Oct. 2019. (Link)

H. M. Dolatabadi and A. Amini, "A Sampling Theorem for Convex Shapes with Algebraic Boundaries," *in Proceedings of the International Conference on Sampling Theory and Applications (SampTA)*, pp. 499-503, 2017. (Link)

Teaching Experience

- **Compressed Sensing** — Sharif University of Technology
  Teaching Assistant — *Spring 2017*

- **Signals and Systems** — Sharif University of Technology
  Teaching Assistant — *Spring 2017*

- **Engineering Mathematics** — Sharif University of Technology
  Teaching Assistant — *Fall 2017*

Relevant Course Grades

- Probability & Statistics: 20.0/20.0
- Computer Vision: 19.9/20.0
- Linear Algebra: 19.75/20.0
- Blind Source Separation: 18.6/20.0
- Random Processes: 19.0/20.0
- Compressed Sensing: 19.4/20.0
- Information Theory: 19.2/20.0
- Engineering Mathematics: 19.7/20.0

Online Courses Taken and Audited

DataCamp	Data Analyst Career Track, Data Scientist Career Track
Coursera	Discrete Optimization, Bayesian Statistics: From Concept to Data Analysis
edX	Probability- the Science of Uncertainty and Data (MITx), Machine Learning (ColumbiaX), Fundamentals of Statistics (MITx)
Udemy	PyTorch for Deep Learning and Computer Vision

References

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