



IPRIA 2019

Sharif University of Technology – Tehran – Iran

WORKSHOP TITLE:

APPLIED DEEP LEARNING FOR COMPUTER VISION

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Abstract

This workshop offers an applied, hands-on exploration of the application of deep learning in computer vision. It builds practical intuition about the core ideas of how to solve real world computer vision problems using deep neural networks. The standard workflow for approaching and solving computer vision problems using deep learning is presented and commonly encountered issues are discussed.

Topics

1. Understanding deep learning
2. DL for Image Classification
3. DL for Image Retrieval
4. DL for Object Detection
5. DL for Semantic Segmentation
6. DL for Similarity Learning
7. DL for Image Captioning
8. Deep Generative Models
9. DL for Video Classification
10. Deployment of deep models

About the Workshop:

The workshop will be presented in four classes. Each class is one and a half hours. The prerequisites for the workshop is fundamentals of machine learning and image processing.

About the instructor:

Babak Majidi received the BSc and MSc degrees in computer engineering from the University of Tehran, Tehran, Iran, in 2000 and 2003, respectively. He received the PhD degree in computer engineering from Swinburne University of Technology, Melbourne, Australia, in 2014. Currently, he is assistant professor in Department of Computer Engineering, Khatam University, Tehran, Iran. His main research interests include applied machine learning, big data analytics, applied computer vision and smart environments.