

Machine Intelligence & Deep Learning

Workshop for Practitioners

June 27-29, 2018

RIT Campus

Overview

Artificial intelligence is profoundly changing our lives. Fueled by recent advances in deep learning, fields such as computer vision, speech recognition, and pattern recognition are being transformed. Advances in technology are redefining applications in human computer interaction, advanced manufacturing, social networking, autonomous systems, security, and entertainment. RIT's practical 3-day workshop is designed to bring you up to speed on the hottest topics in machine and deep learning. You will build AI models during hands-on exercises and learn how to apply concepts and tools to challenges and opportunities within your organization.

Who Should Attend

Scientists, engineers, and technical managers who want to understand and apply AI concepts to their work should attend the workshop. Coverage of course topics will start at the introductory level. Only minimal machine learning experience is necessary—you should be able to complete simple programming tasks.

For more information and to register, please visit

www.rit.edu/kgcoe/cqas/machinelearning

or contact us at cqas@rit.edu



Course Topics

Day 1

- Introduction to Machine Learning: regression, classification, metrics, classification trees, boosting, SVM
- Machine Learning Methods & hands-on exercises: SVM kernels, neural networks, ML Python

Day 2

- Deep Learning Part I: CNN's, fully convolutional CNN's, bounding box and pixel level detection
- Deep Learning CNN & hands-on exercises

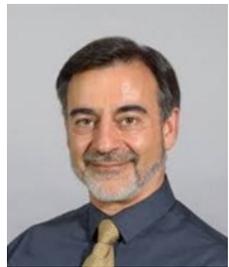
Day 3

- Deep Learning Part II: RNN's, GAN's, reinforcement learning
- Practical uses & hands-on exercises: implementation, optimization, inference

Instructors



Dr. Raymond Ptucha is Assistant Professor in Computer Engineering and Director of the Machine Intelligence Laboratory at the Rochester Institute of Technology. Specializing in machine learning, computer vision, and robotics, Dr. Ptucha has taught many short courses on AI, machine learning, and deep learning. He is also a certified instructor and university ambassador for the NVIDIA Deep Learning Institute where he regularly teaches deep learning courses on computer vision and natural language processing. Dr. Ptucha was awarded the Best Doctoral Dissertation at RIT in 2014 and holds over 30 U.S. patents: rwpeec@rit.edu.



Dr. Majid Rabbani has over 35 years of experience in the field of digital signal, Image and video processing and analysis. His career began at the Kodak Research Laboratories where he retired in 2016 as a Kodak Fellow. He is currently Visiting Professor in the department of Electrical Engineering at the Rochester Institute of Technology. Dr. Rabbani is the co-recipient of two Engineering Emmy awards by the Academy of Motion Pictures, and two Kodak C.E.K. Mees research awards. He is a Fellow of SPIE, a Fellow of IEEE, a Kodak distinguished inventor, and Chair of the SPIE Fellows Committee: mxreec@rit.edu.

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