

## **Ruslan Salakhutdinov**

Курс **Deep Learning Tutorial** (слайды и видео) <http://www.cs.toronto.edu/~rsalakhu/>

Exploiting Image-trained CNN Architectures for Unconstrained Video Classification  
<http://arxiv.org/pdf/1503.04144v3.pdf>

Hamming Distance Metric Learning

[http://www.cs.toronto.edu/~rsalakhu/papers/hamm\\_distance\\_metric\\_learning.pdf](http://www.cs.toronto.edu/~rsalakhu/papers/hamm_distance_metric_learning.pdf)

## **Geoffrey E. Hinton**

Курс **Advanced Machine Learning** <http://www.cs.toronto.edu/~hinton/csc2535/index.html>

<http://www.cs.toronto.edu/~tijmen/csc321/>

## **Berkeley Vision and Learning Center (BVLC)**

**Pieter Abbeel; Dan Klein**

- Курс введения в машинное обучение (системы поиска, биомедицинские технологии и видео-игры) [https://www.edx.org/course/artificial-intelligence-uc-berkeleyx-cs188-1x#.VKuKQmTF\\_oq](https://www.edx.org/course/artificial-intelligence-uc-berkeleyx-cs188-1x#.VKuKQmTF_oq)
- Байесовские сети, деревья принятия решений и нейронные сети  
[https://courses.edx.org/courses/BerkeleyX/CS188x\\_1/1T2013/20021a0a32d14a31b087db8d4bb582fd/](https://courses.edx.org/courses/BerkeleyX/CS188x_1/1T2013/20021a0a32d14a31b087db8d4bb582fd/)

**Pieter Abbeel; Sandy Huang; Zoe McCarthy**

- Курс Advanced Robotics (создание беспилотных автомобилей и роботов)  
<http://www.cs.berkeley.edu/~pabbeel/cs287-fa15/>

**Pieter Abbeel; John Schulman**

- Deep Reinforcement Learning  
<http://rll.berkeley.edu/deeprlcourse/>  
<http://rll.berkeley.edu/deeprlcourse/docs/2015.08.26.Lecture01Intro.pdf>

**Trevor Darrell**

- Caffe <http://caffe.berkeleyvision.org/>
- LRCN <http://jeffdonahue.com/lrcn/>
- LSDA <http://lsda.berkeleyvision.org/>
- Raptor <http://raptor.berkeleyvision.org/>
- Interactive Adaptation of Real-Time Object Detectors <http://hera.inf-cv.uni-jena.de:6680/pdf/Goehring14:ITR>
- Caffe: Convolutional Architecture for Fast Feature Embedding <http://ucb-icsi-vision-group.github.io/caffe-paper/caffe.pdf>

**Alexei (Alyosha) Efros**

- Разглядывать машинки <http://web.cs.ucdavis.edu/~yjee/iccv2013.html>

## **Michael I. Jordan (IEEE Neural Networks Pioneer Award, 2006 )**

On discriminative vs. generative classifiers: A comparison of logistic regression and naive bayes [http://machinelearning.wustl.edu/mlpapers/paper\\_files/nips02-AA28.pdf](http://machinelearning.wustl.edu/mlpapers/paper_files/nips02-AA28.pdf)

Distance Metric Learning, with Application to Clustering with Side-Information  
[http://machinelearning.wustl.edu/mlpapers/paper\\_files/AA03.pdf](http://machinelearning.wustl.edu/mlpapers/paper_files/AA03.pdf)

## **Jitendra Malik**

Analyzing the Performance of Multilayer Neural Networks for Object Recognition  
<http://http.cs.berkeley.edu/Research/Projects/CS/vision/papers/PulkitECCV2014.pdf>  
Еще пример на машинках  
<http://http.cs.berkeley.edu/Research/Projects/CS/vision/shape/from-sc3d.pdf>

## **Joseph E. Gonzalez**

Optimistic Concurrency Control for Distributed Unsupervised Learning  
<http://arxiv.org/pdf/1307.8049v1.pdf>  
ImageNet Large-Scale Visual Recognition Challenge 2014 Going deeper with convolutions  
<http://arxiv.org/pdf/1409.4842v1.pdf>

## **Andrew Ng**

Classification with Hybrid Generative/Discriminative Models  
[http://machinelearning.wustl.edu/mlpapers/paper\\_files/NIPS2003\\_AA69.pdf](http://machinelearning.wustl.edu/mlpapers/paper_files/NIPS2003_AA69.pdf)

Похожее сравнение сетей есть у **Michael I. Jordan**, кстати статью Distance Metric Learning, with Application to Clustering with Side-Information они писали вместе.

Self-Taught Learning: Transfer Learning from Unlabeled Data  
[http://machinelearning.wustl.edu/mlpapers/paper\\_files/icml2007\\_RainaBLPN07.pdf](http://machinelearning.wustl.edu/mlpapers/paper_files/icml2007_RainaBLPN07.pdf)

Large-scale Deep Unsupervised Learning using Graphics Processors  
<http://ai.stanford.edu/~ang/papers/icml09-LargeScaleUnsupervisedDeepLearningGPU.pdf>

Tiled convolutional neural networks  
<http://ai.stanford.edu/~ang/papers/nips10-TiledConvolutionalNeuralNetworks.pdf>

## **Yann LeCun**

Мега-статья про выделение и классификацию объектов на картинке

Learning Hierarchical Features for Scene Labeling  
<http://yann.lecun.com/exdb/publis/pdf/farabet-pami-13.pdf>

Efficient BackProp <http://yann.lecun.com/exdb/publis/pdf/lecun-98b.pdf>  
Boxlets: a fast convolution algorithm for neural networks and signal processing  
<http://yann.lecun.com/exdb/publis/pdf/simard-99.pdf>  
Understanding Deep Architectures using a Recursive Convolutional Network  
<http://yann.lecun.com/exdb/publis/pdf/eigen-iclr-14.pdf>

## **Yangqing Jia**

Trace Ratio Problem Revisited [http://daggerfs.com/assets/pdf/tnn\\_traceratio.pdf](http://daggerfs.com/assets/pdf/tnn_traceratio.pdf)

Normalized Tree Partitioning for Image Segmentation  
[http://daggerfs.com/assets/pdf/cvpr08\\_ntp.pdf](http://daggerfs.com/assets/pdf/cvpr08_ntp.pdf)

### **Словарь сокращений**

**Caffe** — Convolutional Architecture for Fast Feature Embedding

**ICA** — Independent Components Analysis

**CNN** — Convolutional neural network

**DCNN** — Deep convolutional neural network

**LRCN** — Long-term Recurrent Convolutional Networks

**LSDA** — Large Scale Detector Adaptation

**ML** — Machine learning

**MNN** — Multilayer neural network

**Raptor** — Realtime adAPtive detecTOR

**RL** — Reinforcement Learning