Mybridge
We rank articles for professionals
Jan 26 · 9 min read

Learn to Build a Machine Learning Application from Top Articles of 2017

For Jan-Dec 2017, we compared nearly 20,000 articles about **creating a machine learning application** and picked the Top 50.

> *"Hiring a Machine Learning engineer or Data Scientist in Silicon Valley is becoming like hiring a professional athlete. That's how demanding it is"—The New York Times*

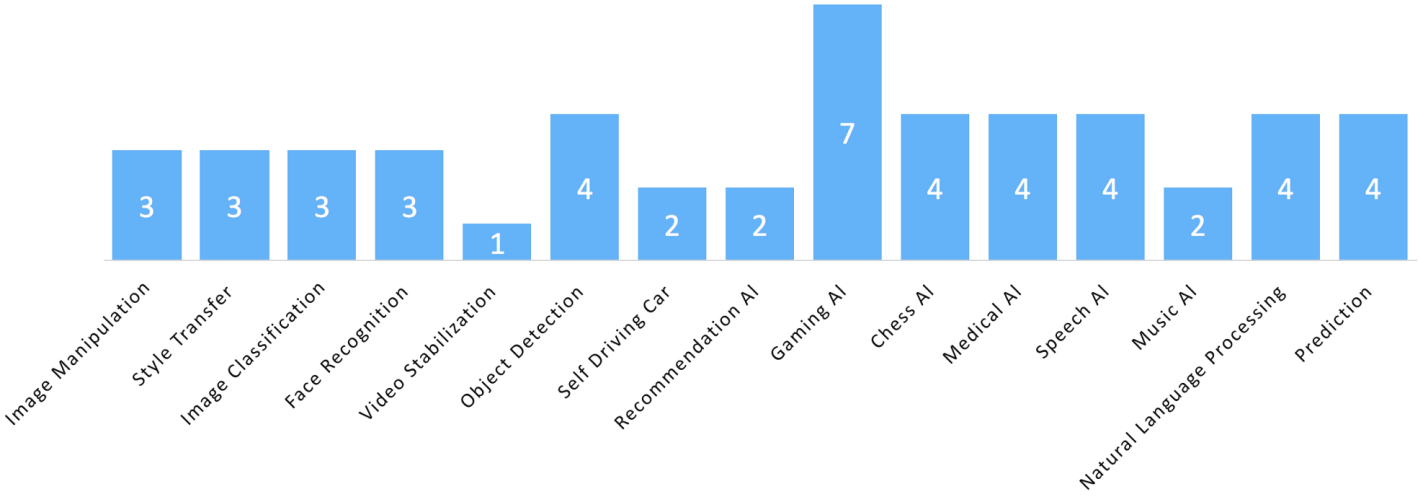
Data scientists are compared to professional athletes due to high demand by the tech giants

Machine Learning has become one of the most demanding skills in the workforce today, with the average salary in US reaching $134,472 (source: Indeed).

We believe learning from data scientists who have hands-on experience in the field is a great way to advance your career. This directory is designed to make your life easier as it organizes the most useful articles written in 2017, where experienced data scientists share their lessons in building and shipping a machine learning application.

As an article ranking service for professionals, we take “quality” very seriously and make sure each article you read is exceptionally good. This is an extremely competitive directory with only 50 articles selected out of 20,000 (0.25%). Mybridge AI is constantly evolving as it ranks articles by the total number of shares & reading time and by our own machine learning algorithm.

This directory has 15 key topics as shown below.



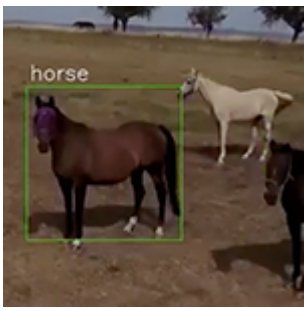
If you're a beginner who are just getting started, we recommend these courses below,

A) Gaming AI

The Beginner's Guide to Building an Artificial Intelligence in Unity.

[5,041 recommends, 4.7/5 stars]

B) Computer Vision



Deep Learning and Computer Vision A-Z™: Learn OpenCV, SSD & GANs and create image recognition apps.

[8,161 recommends, 4.5/5 stars]

If you're looking for open source projects,

- Machine Learning Projects of the Year (avg. 3,558 ⭐): Here

*(Click the numbers below. The numbers are **NOT** ordered by ranking in this post)*

If you like a text version without images: Go to our Github link

<Image Manipulation>

No 1

High-Resolution Image Synthesis and Semantic Manipulation with Conditional GANs. Courtesy of NVIDIA AI and UC Berkeley

. . .

No 2

Using Deep Learning to Create Professional-Level Photographs.
Courtesy of Hui Fang at Google Research

. . .

No 3

High Dynamic Range (HDR) Imaging using OpenCV (Python).
Courtesy of Satya Mallick

<Style Transfer>

No 4

Visual Attribute Transfer through Deep Image Analogy.

. . .

No 5

Deep Photo Style Transfer: A deep-learning approach to photographic style transfer that handles a large variety of image content while faithfully transferring the reference style.

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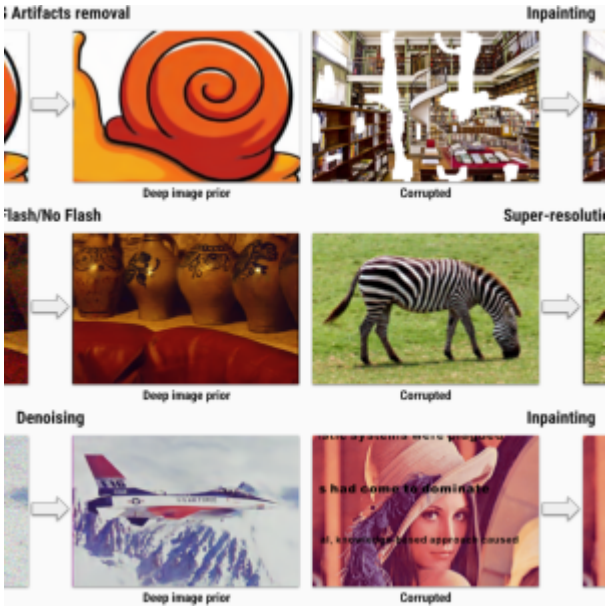
No 6

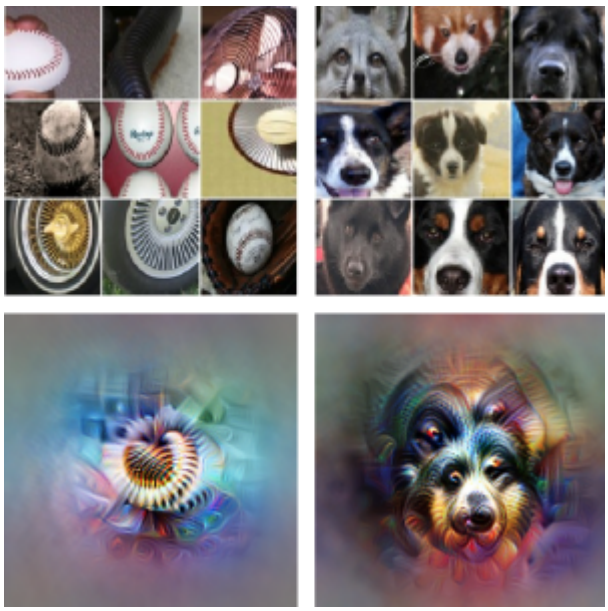
Deep Image Prior: Super-resolution, inpainting, denoising without learning on a dataset and pretrained networks. Comparable results to learned methods. Courtesy of Dmitry Ulyanov



<Image Classification>

No 7

Feature Visualization: How neural networks build up their understanding of images. Courtesy of Chris Olah and Ludwig Schubert at Google Brain



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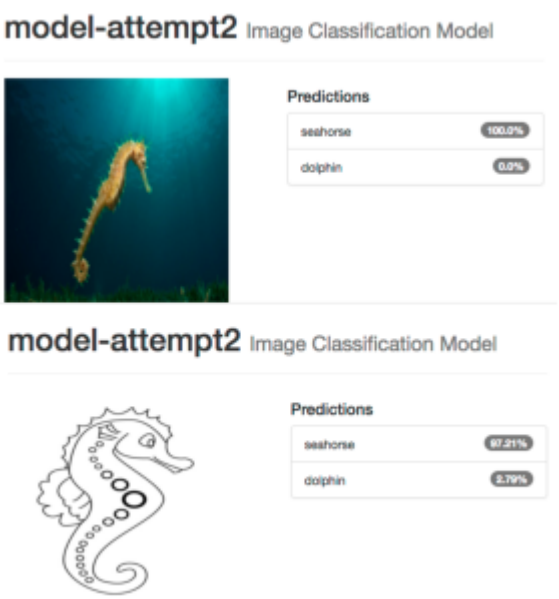
No 8

An absolute beginner's guide to Image Classification with Neural Networks **[4481 stars on Github]**. Courtesy of David Humphrey at Mozilla Firefox



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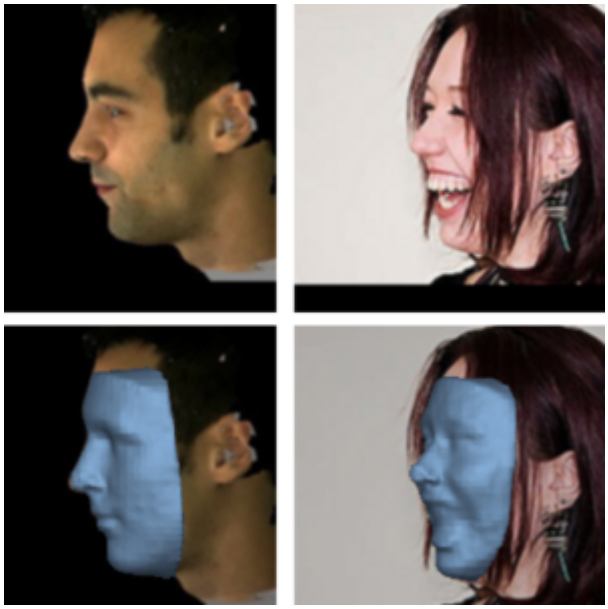
No 9

Background removal with deep learning. Courtesy of Gidi Shperber

<Face Recognition>

No 10

Large Pose 3D Face Reconstruction from a Single Image via Direct Volumetric CNN Regression. Courtesy of Aaron Jackson



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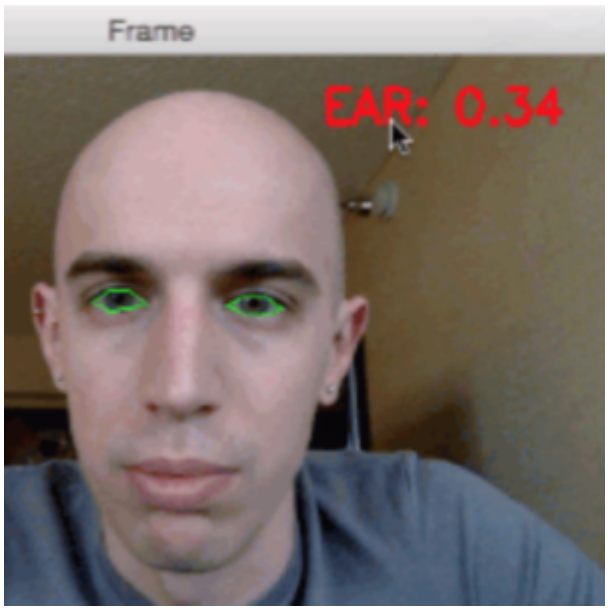
No 11

Eye blink detection with OpenCV, Python, and dlib. Courtesy of Adrian Rosebrock



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No 12

DEAL WITH IT in Python with Face Detection. Courtesy of Kirk Kaiser

<Video Stabilization>

No 13

Fused Video Stabilization on the Pixel 2 and Pixel 2 XL. Chia-Kai Liang at Google Research

<Object Detection>

No 14

How HBO's Silicon Valley built "Not Hotdog" with mobile TensorFlow and Keras. Coutesy of Tim Anglade

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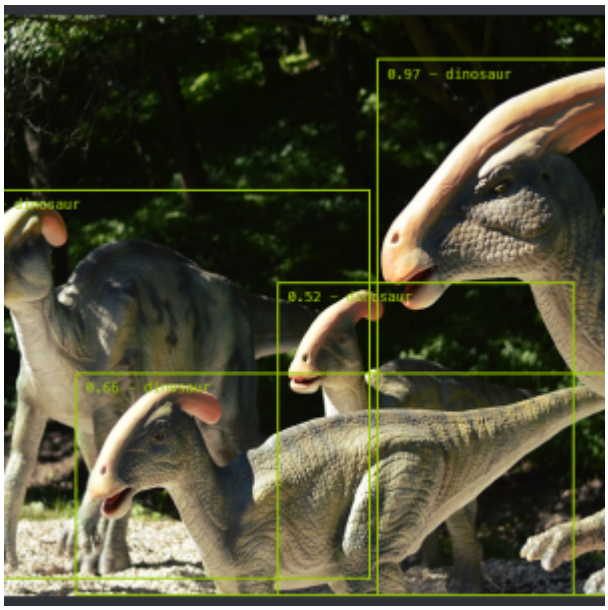
No 15

Object detection: an overview in the age of Deep Learning. Courtesy of Tryolabs



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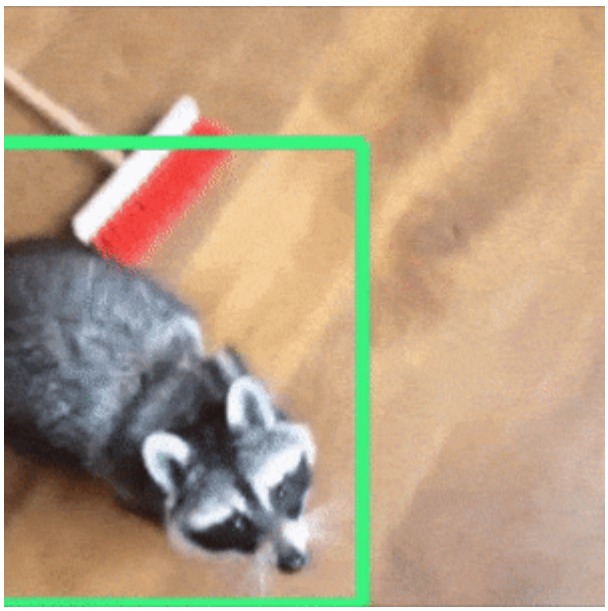
No 16

How to train your own Object Detector with TensorFlow's Object Detector API. Courtesy of Dat Tran



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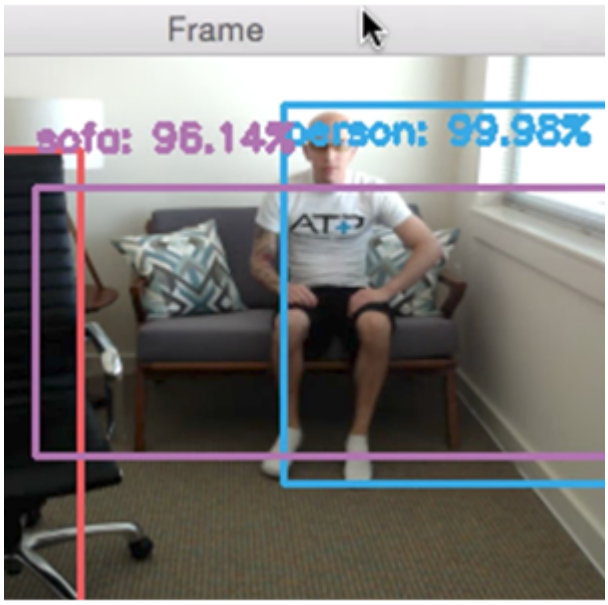
No 17

Real-time object detection with deep learning and OpenCV.



<Self Driving Car>

No 18

Self-driving Grand Theft Auto V with Python : Intro [Part I]. Courtesy of Sentdex

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No 19

Recognizing Traffic Lights With Deep Learning: How I learned deep learning in 10 weeks and won $5,000. Courtesy of David Brailovsky and freeCodeCamp

<Recommendation AI>

No 20

Spotify's Discover Weekly: How machine learning finds your new music. Courtesy of Sophia Ciocca and Hackernoon

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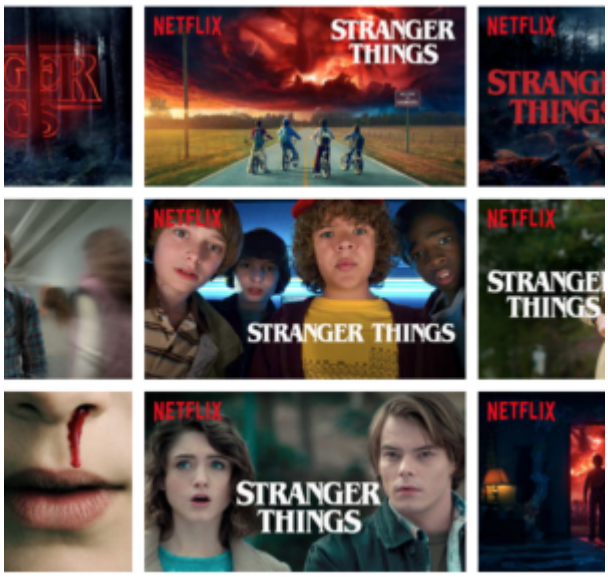
No 21

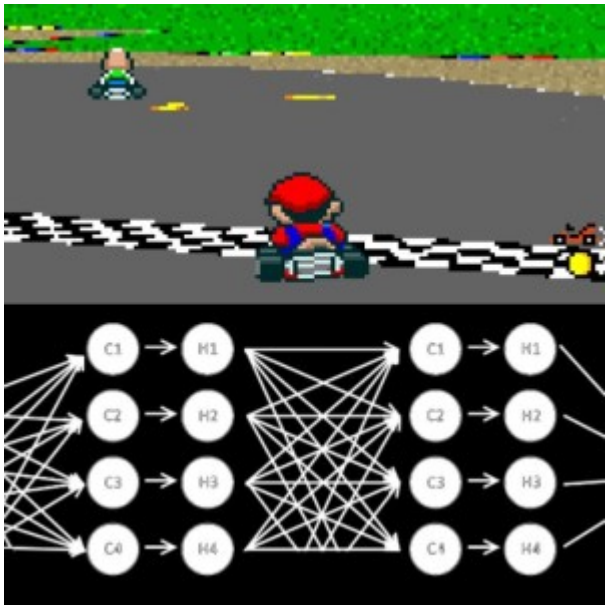
Artwork Personalization at Netflix. Courtesy of Netflix Technology Blog



<Gaming AI>

No 22

MariFlow—Self-Driving Mario Kart w/Recurrent Neural Network. Courtesy of SethBling



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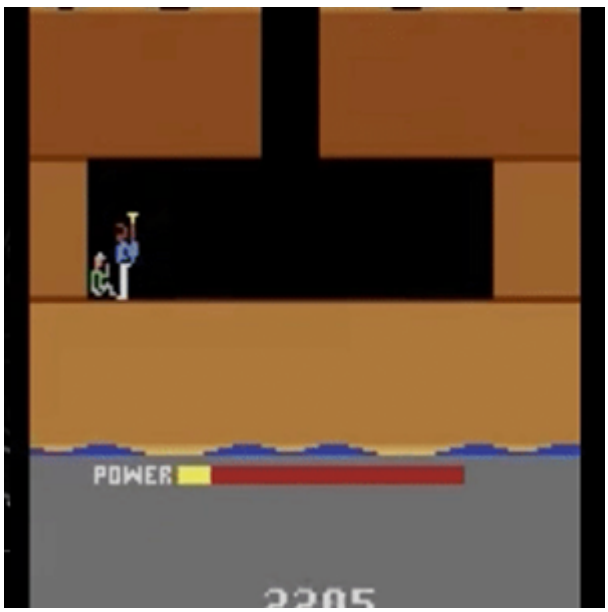
No 23

OpenAI Baselines: DQN. Reproduce reinforcement learning algorithms with performance on par with published results. Courtesy of OpenAI



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No 24

Reinforcement Learning on Dota 2 [Part II]. Courtesy of OpenAI

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No 25

Creating an AI DOOM bot

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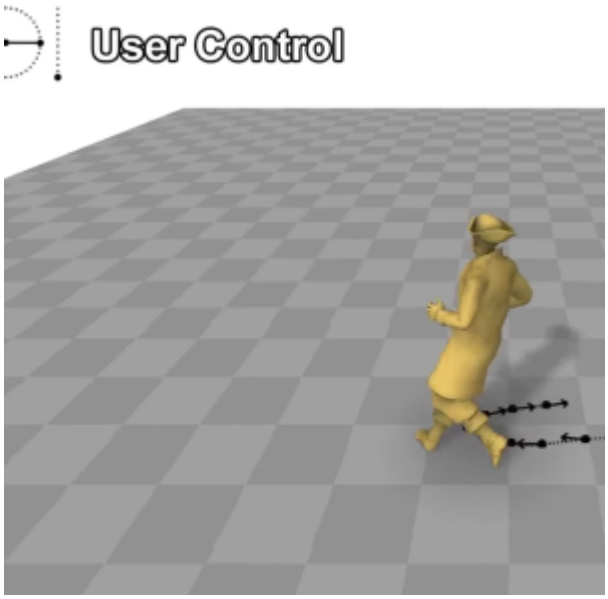
No 26

Phase-Functioned Neural Networks for Character Control. Courtesy of Daniel Holden`



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No 27

The Game Imitation: Deep Supervised Convolutional Networks for Quick Video Game AI. Courtesy of Stanford University

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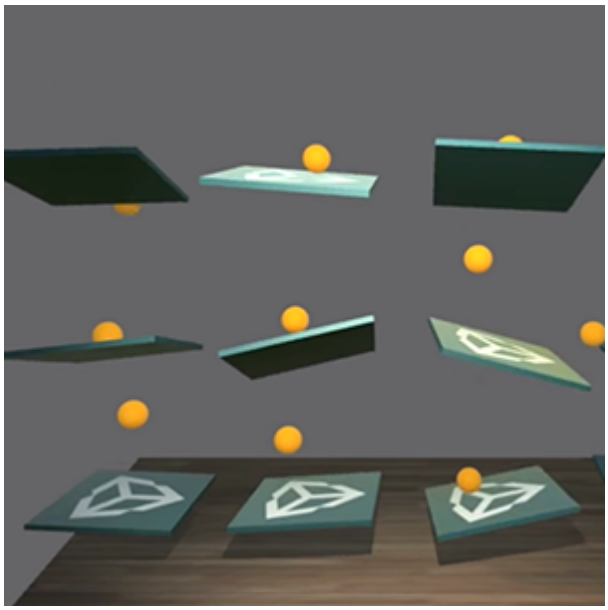
No 28

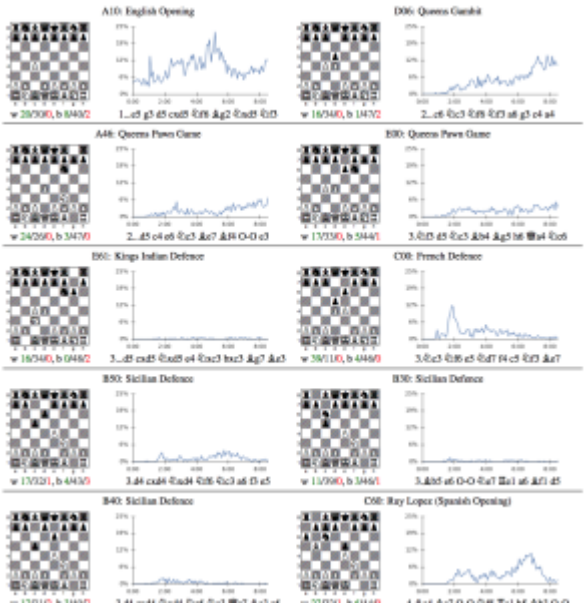
Introducing: Unity Machine Learning Agents. Courtesy of Arthur Juliani at Unity



<Chess AI>

No 29

Mastering Chess and Shogi by Self-Play with a General Reinforcement Learning Algorithm. Courtesy of Deepmind



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No 30

AlphaGo Zero: Learning from scratch. Courtesy of DeepMind.

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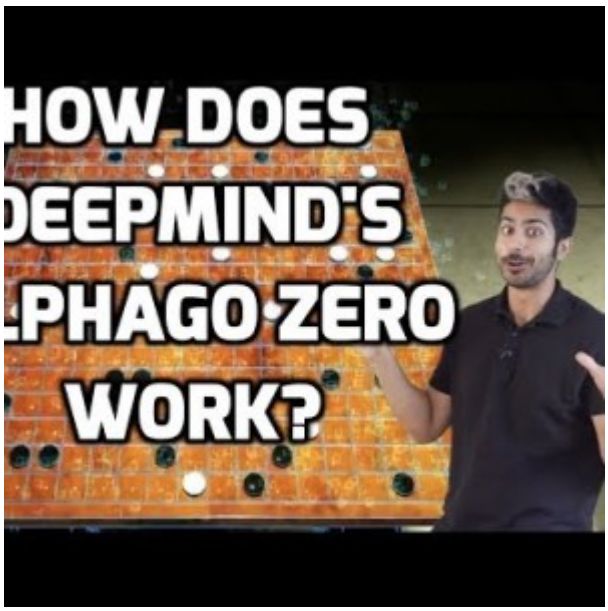
No 31

How Does DeepMind's AlphaGo Zero Work? Courtesy of Siraj Raval



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No 32

A step-by-step guide to building a simple chess AI. Courtesy of Lauri Hartikka

<Medical AI>

No 33

CheXNet: Radiologist-Level Pneumonia Detection on Chest X-Rays with Deep Learning. Courtesy of Andrew Ng and others at Stanford ML Group

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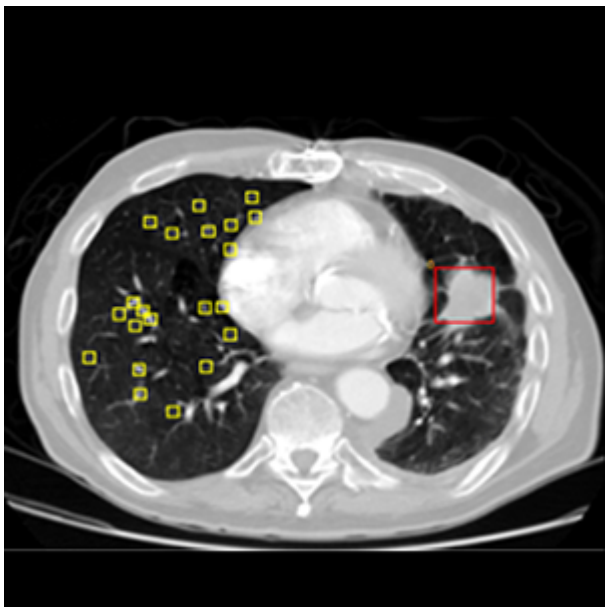
No 34

Can you improve lung cancer detection? 2nd place solution for the Data Science Bowl 2017.



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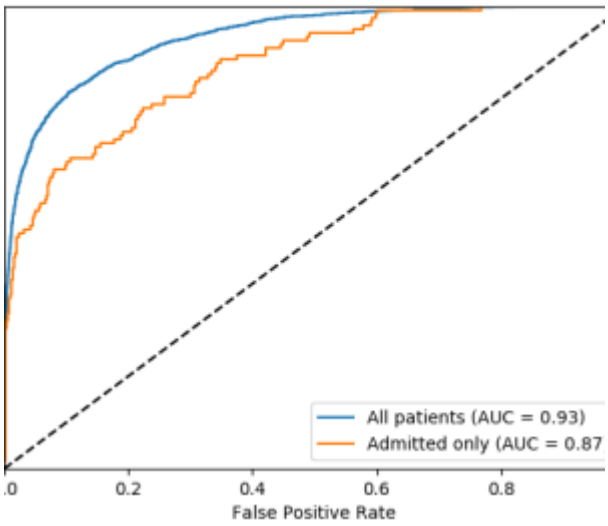
No 35

Improving Palliative Care with Deep Learning. Courtesy of Andrew Ng and others at Stanford ML Group



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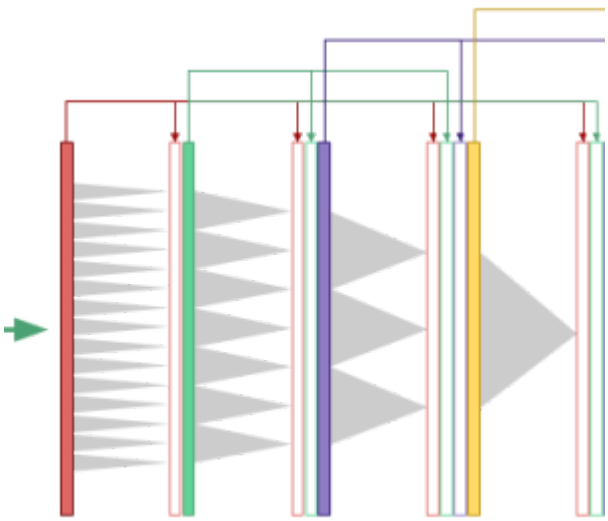
No 36

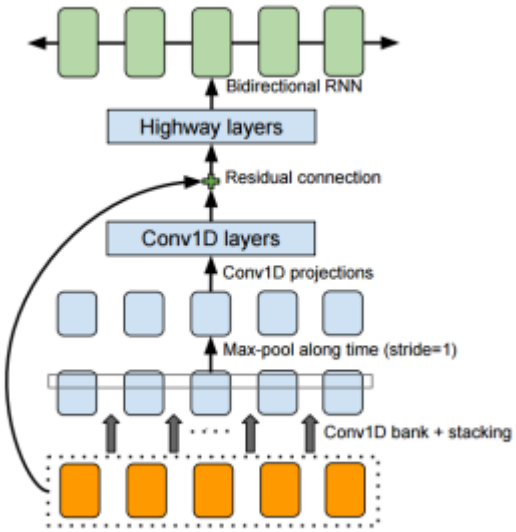
Heart Disease Diagnosis with Deep Learning. Courtesy of Chuck-Hou Yee



<Speech AI>

No 37

Tacotron: A Fully End-to-End Text-To-Speech Synthesis Model—Data Scientists at Google.



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No 38

Sequence Modeling with CTC. Courtesy of Awni Hannun, Ph.D at Stanford

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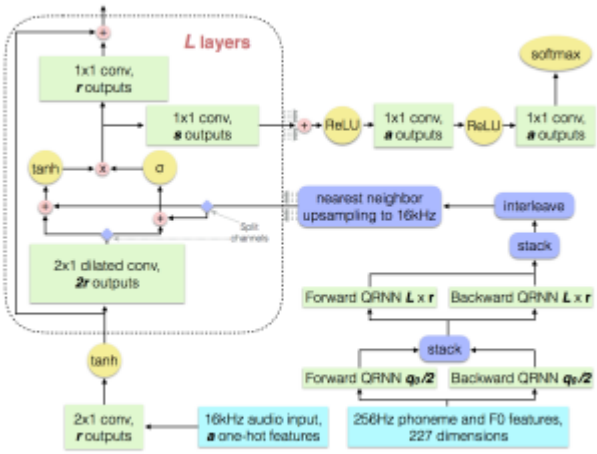
No 39

Deep Voice: Real-time Neural Text-to-Speech—Baidu Silicon Valley AI Lab.



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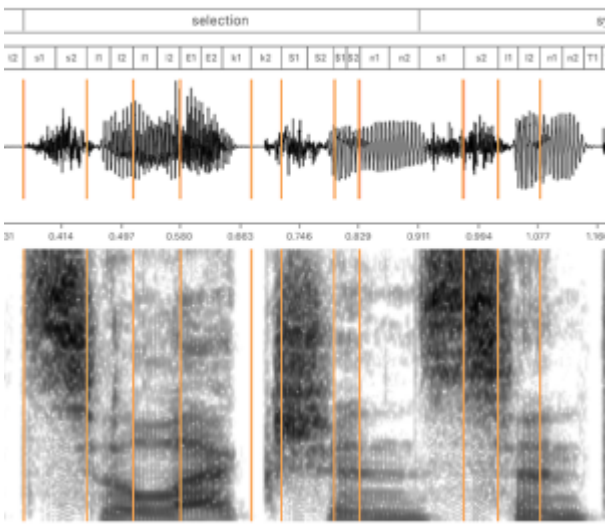
No 40

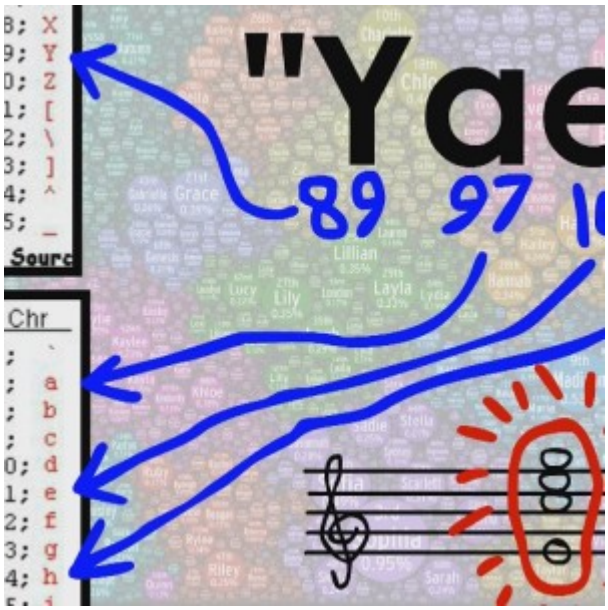
Deep Learning for Siri's Voice: On-device Deep Mixture Density Networks for Hybrid Unit Selection Synthesis—Apple.



<Music AI>

No 41

Computer evolves to generate baroque music! Courtesy of Cary Huang



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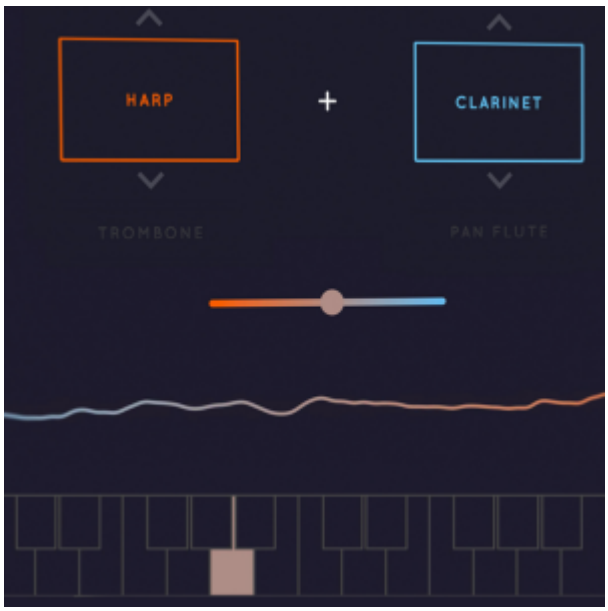
No 42

Make your own music with WaveNets: Making a Neural Synthesizer Instrument. Courtesy of Jesse Engelberg



<Natural Language Processing>

No 43

Learning to communicate: Agents developing their own language—OpenAI Research.

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No 44

Big Picture Machine Learning: Classifying Text with Neural Networks and TensorFlow. Courtesy of Déborah Mesquita

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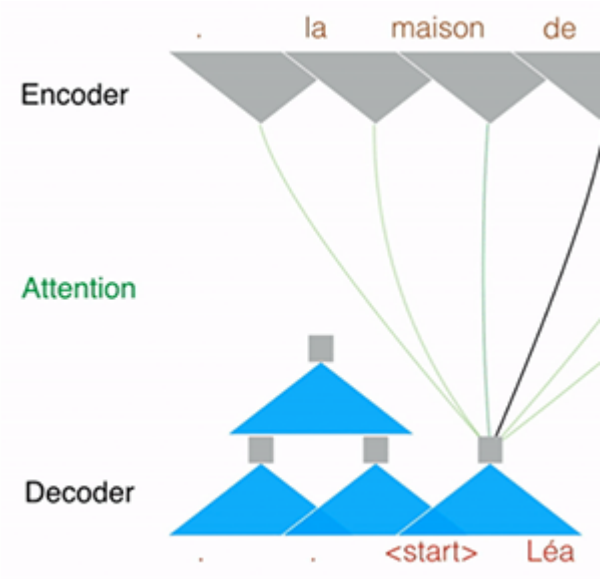
No 45

A novel approach to neural machine translation—Facebook AI Research.



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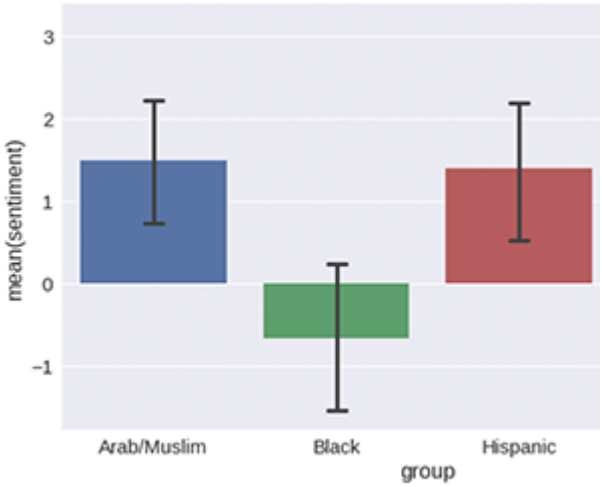
No 46

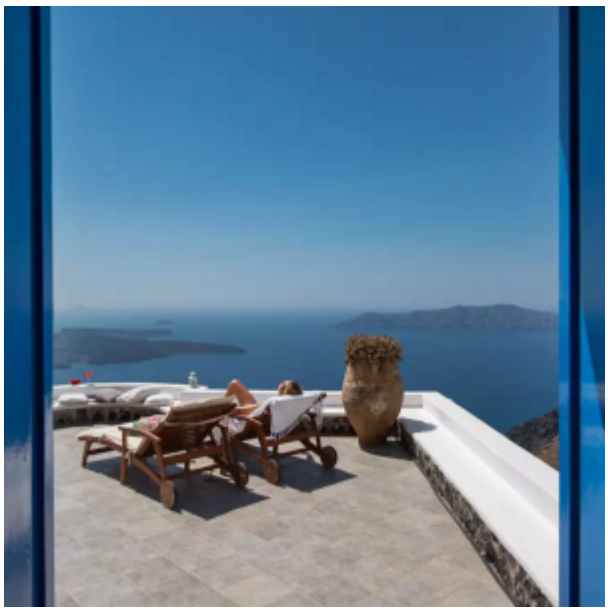
How to make a racist AI without really trying.



<Prediction>

No 47

Using Machine Learning to Predict Value of Homes On Airbnb.
Courtesy of Robert Chang, Data at Aribnb



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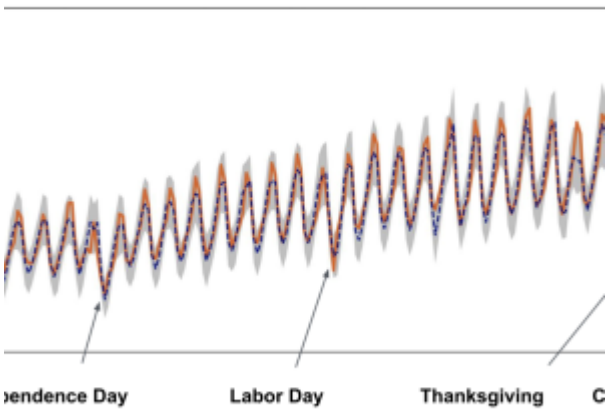
No 48

Engineering Uncertainty Estimation in Neural Networks for Time Series Prediction at Uber.



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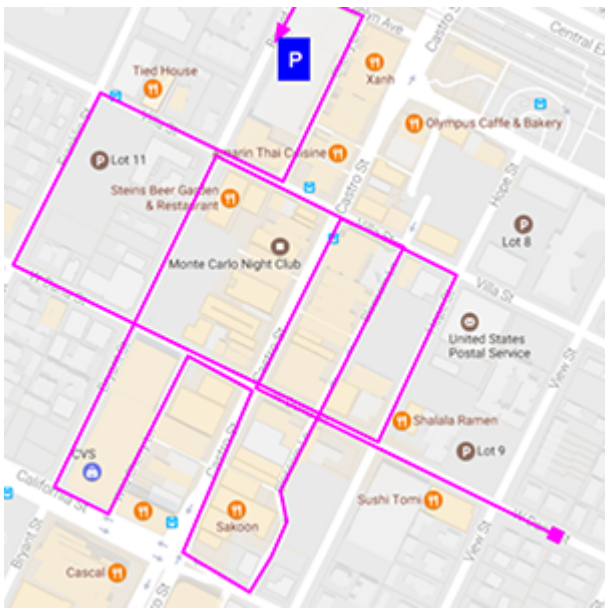
No 49

Using Machine Learning to make parking easier.



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No 50

How to Predict Stock Prices Easily—Intro to Deep Learning #7.

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