

Rework ML Summit 2017

OpenAI

- Reinforcement Learning
- Robotics
- IoT

- Unsupervised
- GAN
- VAE
- App: Semantic Editing

- NLP
- Chat Agent Apps
- Chatbot as a Doc
- Datalog.ai

- Healthcare (Remedy)
- Brendan Frey, Deep Genomics

- Video Understanding 20 billions Neurons
- Image Annotation
- PFN
- GPUaaS
- Tractable.io

- FB
- Emoji prediction, Flickr
- Unity
- Nvidia
- Netflix
- Sustainability

ML in 2017

- Enable machine to be better in handling human tasks
- First day: Reinforcement learning, Robotic learning
- Leads to: ML in IoT
- Interesting platform: Preferred Networks

Second day

- Unsupervised learning.
- Generative Adversarial Networks-Similar to Reinforcement Learning's agent method (two parallel parties), but with a significant difference: GAN can explain the structure of information used in inference.
- TY: Explanation-Based Learning
- Variational autoencoders: encoder, decoder and lost function. Exploring the statistical difference between two networks and generate new dataset. Hand writing data -> more hand writing data (not just binary answer of true/false).
- Semantic Editing

Healthcare related

- Chatbot pretending to be a doctor: unimpressed – Remedy chatbot
- Deep Genomics: genetic variation, molecular diagnostics, genetic therapeutic dev

What matter to us

- Twenty Billions Neurons
- Dr. Roland Memisevic
- Manufacturing ML extension to IoT
- Ultrasound annotation by MTY.ai
- GPUaaS: Girrascale
- More sophisticated video learning:
Tractable.io

Others

- Emotion/Emoji Prediction -> FastText, LSTM, WordCNN
- ML and sustainability
- Robotic arm products: Delft Robotics, PFN, Kiva Robotics, Mimb Ro, MIT
- FB
- Google
- Netflix
- Nvidia
- Unity3D