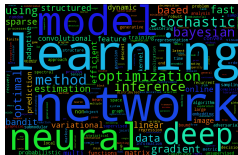
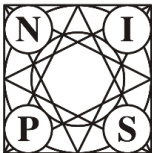


# Highlights of NIPS 2016

Nishanth Koganti

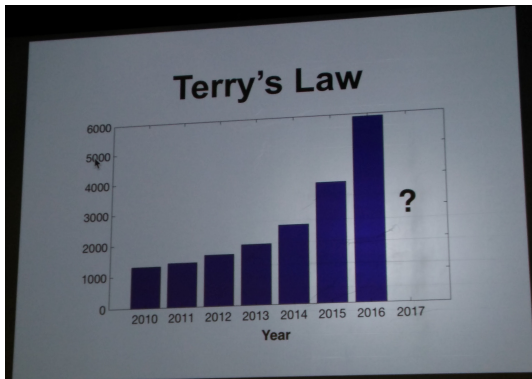
Research Student, Shibata Lab  
Kyushu Institute of Technology

January 13, 2017



# Neural Information Processing Systems

- ▶ Largest International Conference on Machine Learning.
- ▶ Held since 1987 and initially focused on Neural Network research.

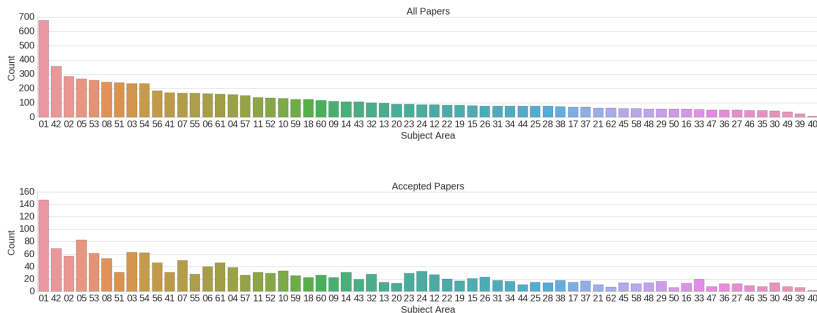


Terry's Law on NIPS Participants <sup>1</sup>

<sup>1</sup>Proposed by [Terrence Sejnowski](#), NIPS 2016 Chair

# NIPS 2016: Topics Converged

- ▶ 568 Papers (46 oral) accepted among 2400 papers with 6 reviewers per submission.
- ▶ Most popular topics were Deep Learning (1 in 4) with application to Computer Vision (1 in 10).



Long-tailed Distribution of Topics <sup>1</sup>

<sup>1</sup>NIPS 2016 Review Process



# Generative Adversarial Networks: Overview



# GAN: Applications

# Bayesian Deep Learning



# Deep Learning and Graphical Models

# Dropout as a Bayesian Approximation

# Deep Reinforcement Learning: Tutorials



# Value Iteration Networks

# Recurrent Neural Networks: Overview







# Learning to learn: Meta-learning

# One-shot Learning

# Neural Turing Machines: Overview



# Nuts and Bolts of ML

# General AI: Unsupervised Learning

# Boston Robotics Demo

# Efficient seeding for K-Means



# RocketAI: The AI Bubble

# Sightseeing in Barcelona

Thank you!

Questions or Comments?