Carles Gelada

Al researcher



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EXPERIENCE



Brain Resident - Google

Sept. 2017 - now Montreal, Canada



Research Intern - Tractable

Mar. 2017 - Jun. 2017 (3 months) London, UK Researching Active Learning. I developed a general method to approximate the information gain of labeling any image.

SELECTED PROJECTS

Reproducing DQN

I developed DRL, one of the better performing, open-source implementations of DQN and variants. It is designed to be flexible and facilitate code reusability.

Learning to search

In this article on my blog I showed that exploration strategies could be learned and efficiently combined with Monte Carlo tree search methods.

Variable plasticity networks

I **proposed** a neural network architecture that is able to activate separately it's parts and train them with variable learning rates. It could significantly help in reducing gradient variance, something critical to scaling up deep RL to multiple and more complex tasks.

RESEARCH INTERESTS

Fundamental theory in deep learning, reinforcement learning, bayesian neural networks and optimization—theory.

Also interested in more high level problems like meta-learning, hierarchical RL, model based RL and pretty much anything AI related.

PROGRAMMING LANGUAGES

C/C++, python and lua.

DL FRAMEWORKS

Tensorflow Currently doing all my research in it.

Torch

LANGUAGES

English, Catalan and Spanish.

EDUCATION

At 16 I dropped out of school. I studied math with a private teacher for 2 years and, on my own, I learned about programing, electronics, physics, drones, etc. I then focused fully on AI, starting to work on convnets and then moving into deep RL.