Mohamed AKROUT

AI Enthousiast & Practitioner Technology Writer at Prescouter

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@makrouttch

EDUCATION

2017 – 2018 Master of Science

University of Toronto, Toronto Specialization: Machine Learning, Deep learning, Reinforcement Learning

GPA: 4.0/4.0

2014 – 2016 Dual Bachlor of engineering

TELECOM PARISTECH (ENST), PARIS Specialization: Statistics & Economy

2010 – 2014 Bachelor of Computer Science

University of Montreal, Montreal Specialization: Software engineering

GPA: 3.71/4.0

IT Skills

Programming PYTHON, C++, JAVA,

R, PHP, JS, AJAX, SQL

Softwares and tools AI/ML: Tensorflow

Big Data: Hadoop, Spark

SCM: Git, SVN

Servers: Apache, Postgres

COMMUNICATION SKILLS & HOBBIES

Languages English: Fluent

French: Native Spanish: Beginner

Associations Mentor at UofT Student Life Programs

Former chess member at Poly Montreal

Sports Chess (Elo: 2068), Table tennis

Hobbies Violin practice, Traveling (14 countries)

CERTIFICATIONS & DISTINCTION

May 2018 Accelerate Program Scholarship

Mitacs - 30.000 \$CAD

January 2018 Addictive Mobility Scholarship

University of Toronto - 1.250 \$CAD

September 2014 Dual Degree Scholarship

Quebec Government - 6.000 \$CAD

September 2013 UPIR Scholarship

University of Montrea - 1.500 \$CADl

May 2013 NSERC Undergrad Scholarship

NSERC - 6.000 \$CAD

PUBLICATIONS

Improving Skin Condition Classification with a Question Answering Model

<u>Mohamed Akrout, Amir-massoud Farahmand, Tory</u> <u>Jarmain — NeurIPS 2018</u>

- build a Question Answering (QA) model that improves the skin disease classification up to 30%.
- Mimic doctors who are able to ask follow-up questions to narrow down the diagnosis.

Benchmarking and Analyzing Deep Neural Network Training

Hongyu Zhu, <u>Mohamed Akrout</u>, Bojian Zheng, Andrew Pelegris, Amar Phanishayee, Bianca Schroeder, and Gennady Pekhimenko — IISWC 2018

- Benchmark six major ML application domains and eight different state-of-the-art models.
- Build tools for memory profiling that show how much memory is consumed by network training.

Professional experiences

May 2018 - Present

Research Scientist — Triage, Canada

- Implement a reinforcement learning solution to prototype Triage QA system.
- Improve the classification of skin diseases by incorporating non-imaging data.

June 2016 - May 2017

R&D Scientist — Television of France, France

- Implemented optimized algorithms to analyze data from SQL servers.
- Helped the top management to take decisions by providing BI dashboards and KPIs.

 $May\ 2017-August\ 2017$

Neuroscience Intern — ENS ULM, France

- Learned the mathematical models behind RNN variants which use FORCE Learning.
- Modified the backpropagation algorithm by adding finite rank perturbations.

May 2013 - August 2013

NSERC Research Intern — EPM, Canada

- Optimized numerical Navier-Stockes schemes.
- Contributed to an official open-source OpenFoam project.