Luiz Gustavo Hafemann

Address	**:**	5010 Macdonald Ave, apt 8
		Côte Saint-Luc, Québec, H3X 2V4
Phone	**:**	+1 438 403-5125
Email	**:**	luiz.gh@gmail.com

Machine Learning researcher

Ph.D. student at ÉTS - École de technologie supérieure (Montreal / Canada) since April-2015. My research is focused on Offline Signature Verification Systems, in particular on learning feature representations from handwritten signature images.

I obtained my master's degree in Computer Science from the Federal University of Paraná (Curitiba / Brazil) with focus in Machine Learning. My research consisted in exploring Deep Learning models for Texture Classification.

I have also worked as a software engineer at ExxonMobil, having solid programming skills in .NET development (C#), Microsoft SQL Server development (T-SQL) and administration.

SUMMARY OF QUALIFICATIONS

- Machine Learning skills, with knowledge on training and evaluating classifiers (Deep Neural Networks, SVMs) for computer vision tasks
- Programming skills in Python, C++ and C#. Fast learner for new programming languages.
- Strong analytical thinking and problem solving skills

TECHNICAL EXPERTISE

- Programming Languages: Python, C++, C#, C, shell script
- ML Libraries: Theano, Lasagne, tensorflow, libsvm, scikit-learn

PROFESSIONAL EXPERIENCE

ExxonMobil Business Support Center Brasil, Curitiba - Brazil
Software Engineer   **May-2012 – February-2015**

Core Responsibilities:
- Software engineer for web-based applications, using agile methodologies (Scrum).
- Lead developer for a Database Automation solution, coordinating the development efforts with 4 other developers, and managing dependencies (infrastructure, risk assessment).
- Lead developer for a Help Desk application. Responsible for selecting technologies / frameworks to be used, designing the application and developing the back-end functionality.

ExxonMobil Business Support Center Brasil, Curitiba - Brazil
Database Administrator   **Jan 2009 – Apr-2012**

Core Responsibilities:
- Database support for mission-critical SQL Server applications, providing base support and support to projects (e.g. assisting the selection of High-availability solutions, storage requirements and forecast, among others).
- Coordinate activities for large-scale rollout of database-related tools (example: coordinated the DBA effort to rollout a Database Activity Monitoring tool in 1000 database instances, involving 40 DBAs from five different countries).

PUBLICATIONS

Hafemann, L., Sabourin, R., Oliveira, L., **Learning Features for Offline Handwritten Signature Verification using Deep Convolutional Neural Networks**, Pattern Recognition, 2017.

Hafemann, L., Sabourin, R., Oliveira, L., **Analyzing features learned for Offline Signature Verification using Deep CNNs**, International Conference on Pattern Recognition (ICPR), Cancun, Mexico, 4-8 December 2016.

Hafemann, L., Sabourin, R., Oliveira, L., **Writer-independent Feature Learning for Offline Signature Verification using Deep Convolutional Neural Networks,** International Joint Conference on Neural Networks (IJCNN), Vancouver, Canada, 24-29 July 2016.

Hafemann, L., Sabourin, R., Oliveira, L., **Offline Handwritten Signature Verification-Literature Review,** arXiv preprint arXiv:1507.07909, 2015.

Hafemann, L., Oliveira, L., Cavalin, P., Sabourin, R., **Transfer Learning between Texture Classification Tasks using Convolutional Neural Networks**, International Joint Conference on Neural Networks (IJCNN), Killarney, Ireland, 12-17 July 2015.

Hafemann, L., Oliveira, L., Cavalin, P., **Forest Species Recognition Using Deep Convolutional Neural Networks**, International Conference on Pattern Recognition (ICPR), Stockholm, Sweden, 24-28 August 2014.

EDUCATION

BS Computer Science - Federal University of Paraná, Curitiba, Brazil **2005 – 2008**
MS Computer Science - Federal University of Paraná, Curitiba, Brazil **2013 – 2014**
Ph.D Computer Science – École de technologie supérieure, Montreal, Canada **2015 – present**

ADDITIONAL INFORMATION

Languages: Portuguese (Native), English (Fluent), French (Advanced)
Other courses taken: Convolutional Neural Networks for Visual Recognition (Stanford, online)
Machine Learning (Stanford, via Coursera),
Probabilistic Graphical Models (Stanford, via Coursera),
Neural Networks (University of Toronto, via Coursera),
Analytics Edge (MITx, via EDX)
GitHub account: https://github.com/luizgh