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SUMMARY/OBJECTIVE

I am a Ph.D. candidate in computer science at the University of Quebec (ETS), where I focus on machine learning and computer vision. During my master's and doctoral studies, I worked on several deep learning and data science projects. Many of my assignments required me to use computer vision and machine learning. Moreover, I participated in hackathons and Kaggle challenges. My main interests are supervised/semisupervised/unsupervised/reinforcement learning, and I am currently working on document image analysis (handwriting text recognition).

EDUCATION

(Machine Learning -Computer Vision), [École De Technologie Supérieure](#). August 2018 - present
Computer Science (NLP), [King Abdulaziz University](#). March 2015 - May 2018.
Computer Science, [University of Hail](#). April 2009 - August 2013.

SKILLS

- **Data Structures:** Sorting, Recursion, Trees, Graphs, Dynamic Programming, Ad-hoc, Linked Lists, Stacks, Queues, and Strings.
- **Programming languages:** For machine learning and Data science (Python, R), and basic knowledge of Java, C#, C++, VB.net, Matlab, and Octave.
- **Deep Learning Framework:** Tensorflow, PyTorch, Keras, PyTorch Lightning, Theano, Caffe, and mxnet.
- **Website Development:** WordPress, Bootstrap, MySQL, PHP, HTML, CSS, JQuery, Javascript, and basic knowledge in Docker and Kubernetes.
- **GPU Programming:** Compute Canada servers like mist, Niagra, etc., Calcul Quebec like Narval, Lambda server, AWS, GCP, and Kaggle.
- **Organizational and planning skills:** communication skills, teamwork, data collection and management, attention to detail, problem analysis, and initiative confidentiality.

EXPERIENCE

- Researcher as a Ph.D. candidate in Synchromedia Lab, ETS, Canada, March 2020 – present. The main focus is on using machine learning and computer vision algorithms to recognize and analyze document (handwriting) images.
- Work on various machine learning projects/competitions like the Kaggle competition.

Relevant courses

1. **Image Processing** (COMP6771), [University of Concordia](#), Autumn 2018.
2. **Machine Learning**, taught by Andrew Ng, offered by Sandford Univerity on [Coursera](#).
3. **Machine Learning Engineering for Production (MLOps) Specialization**, taught by Andrew Ng, Laurence Moroney, and Robert Crowe, offered by DeepLearning.AI on Coursera, contains the following [courses](#).

4. **Deep Learning with PyTorch: Zero to GANs, and Natural Language Processing: Zero to NLP**, by [Jovian](#).
5. **Artificial intelligence engineer with eight projects**), [Simplilearn](#), June 2020 - March 2021. **GitHub hosts my projects, and labs are [here](#).**
6. **Advanced Certification Program in AI/ML**, [IIIT Hyderabad ML Lab](#), September 2020 - March 2021. **Kaggle Competitions** hosted [Image Classification](#), [Sales Forecasting](#) plus, GitHub hosts my Hackathons, Mini-Hackathons, and labs [here](#).
7. **Deep Learning with PyTorch OpenCV course with four Projects**, [OpenCV](#), July 2020 - January 2021. [Kaggle Competition Classification](#), [Kaggle Competition - Semantic Segmentation](#), plus GitHub hosts my labs and projects are [here](#).
8. **PylmageSearch Customers - PylmageSearch [Gurus](#) Course**, November 2020 - November 2022, **Skills achieved:** By completing 13 modules and multiple tests in 2 years, I understood the fundamentals of computer vision algorithms.
9. **PylmageSearch [University](#) ImageNet Bundle - Deep Learning for Computer Vision with Python**, March 2020 - Present. Thant contains three levels of deep learning books.
10. **PylmageSearch University [Full Access Plan](#)**, March 2020 - Present, from zero to hero and up-to-date courses.
11. **Various ML ONLINE COURSES AND CERTIFICATES on [Udemy](#).**

Academic Awards

- Certificate of Excellence, Faculty: Computing & information technology, King Abdelaziz University, Jeddah, Saudi Arabia, 2014-2015, Has achieved a GPA of "Excellent" in both successive semesters of the academic year 2015-2016.
- Certificate of Excellence, Faculty: Computing and Information information technology, King Abdelaziz University, Jeddah, Saudi Arabia, 2015- 2016, Has achieved a GPA of "Excellent" in both successive semesters of the academic year 2015-2016.
- Certificate of Attendance Map of professional technical courses, Faculty: Computing & information technology, King Abdelaziz University, Jeddah, Saudi Arabia, 2015-2016, Has attended this course of the academic year 2015-2016.

Publications

- Hamdan, Mohammed H., and Imtiaz H. Khan. "An analysis of prepositional-phrase attachment disambiguation." *International Journal of Computational Linguistics Research* 9, no. 2 (2018): 60-80, IF: 2.27.
- Hamdan, M., Chaudhary, H., Bali, A., & Cheriet, M. (2022). Refocus attention span networks for handwriting line recognition. at: *International Journal on Document Analysis and Recognition (IJDAR)*, IF: 3.870.
- Hamdan, Mohammed, Mr Chaudhary, and Mohamed Cheriet. (2022) "Transformer-Based Joint Attention Segmentation-Free for End-to-End Handwriting Paragraph Recognition Model." *Journal of Neurocomputing*, IF: 5.71.

Course-based projects are listed in [my medium CV](#); further details are in [my long CV](#).