YASSER GONZALEZ

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SUMMARY

- Passionate about building scalable ML solutions to real-world problems.
- Interested in applications of recommender systems, search and information retrieval, ranking, representation learning, and natural language processing.

EXPERIENCE

2023–present **Staff Machine Learning Engineer.** Shopify, Canada.

2021–2023 **Senior Data Scientist.** Shopify, Canada.

- Tech lead for recommender systems in the Shop app, serving 100M+ users.
- Building ML systems featuring vector based retrieval, learning-to-rank models, batch & online inference using TensorFlow, xgboost, Airflow, Dataflow, Spark, and Vertex AI on GCP.

2018–2021 **Applied Scientist.** Amazon, Canada.

- Improving Alexa's natural language understanding.
- Developed deep learning models and representation learning methods for entity resolution using Spark, TensorFlow, FAISS, and Elasticsearch.

2017–2018 **Senior Data Scientist.** Canopy Labs, Canada.

2015–2017 **Data Scientist.** Canopy Labs, Canada.

- Built recommender systems and other predictive models for different industries such as retail and travel using Spark, MongoDB, TensorFlow, PyTorch, scikit-learn, and xgboost.

2013–2015 **Research & Teaching Assistant.** York University, Canada.

- Designed and implemented reinforcement learning techniques to optimize the user interaction in configuration processes.
- Researched approaches to improve search heuristics on multimodal optimization problems.

2011–2013 **Research Assistant**. Institute of Cybernetics, Mathematics and Physics, Cuba.

- Proposed estimation of distribution algorithms (EDAs) using copulas and vines for mathematical optimization.
- Maintainer of R packages available on CRAN and a C library for dependence modeling using vines.

EDUCATION

2013–2015 **Master's degree, Information Systems & Technology.**
York University, Canada.

- *Thesis:* Efficient Calculation of Optimal Configuration Processes.

2014–2015 **Data Science Specialization.**
Offered by Johns Hopkins University through Coursera.

2006–2011 **Bachelor's degree, Computer Science.**
University of Havana, Cuba.

- *Thesis:* Estimation of Distribution Algorithms Based on Copulas and Vines.

SELECTED PUBLICATIONS

- Y. Gonzalez-Fernandez, S. Hamidi, S. Chen, S. Liaskos. (2019). Efficient Elicitation of Software Configurations Using Crowd Preferences and Domain Knowledge. *Automated Software Engineering*, 26(1), 87–123. https://link.springer.com/article/10.1007/s10515-018-0247-4
- Y. Gonzalez-Fernandez, S. Chen. (2015). Leaders and Followers – A New Metaheuristic to Avoid the Bias of Accumulated Information. In *IEEE Congress on Evolutionary Computation*, 776–783. IEEE. https://dx.doi.org/10.1109/CEC.2015.7256970.
- Y. Gonzalez-Fernandez, S. Chen. (2014). Identifying and Exploiting the Scale of a Search Space in Particle Swarm Optimization. In *Conference on Genetic and Evolutionary Computation*, 17–24. ACM. https://doi.acm.org/10.1145/2576768.2598280.
- Y. Gonzalez-Fernandez, M. Soto. (2014). copulaedas: An R Package for Estimation of Distribution Algorithms Based on Copulas. *Journal of Statistical Software*, 58(9), 1–34. https://www.jstatsoft.org/v58/i09.