

Baldwin Cortes, Ph.D.

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SUMMARY

Seasoned machine learning engineer and data scientist with a Ph.D. in Electrical Engineering, specializing in data analytics, SQL, and Python. Expertise in machine learning for regression, classification, and forecasting, along with extensive experience in large language models (LLMs) and image processing. Proficient in utilizing Pandas for data manipulation and analysis. Developed cutting-edge techniques for optimizing photovoltaic systems using deep reinforcement learning. Adept at leveraging cloud computing platforms such as Microsoft Azure and Huawei Cloud. Recently awarded an AI certification from Huawei and selected for an advanced hands-on AI training program in China.

EXPERIENCE

Machine Learning Engineer - G2i Inc., USA (In partnership with Scale AI) Jun 2024 - Present

- Evaluated the quality of AI-generated code, providing human-readable summaries of rationale.
- Assisted in training LLMs by evaluating responses and providing recommendations on understanding assignments.

Research Scientist (Ph.D. graduate) - UMSNH, Mexico Mar 2018 - Feb 2022

- Conducted time series forecasting experiments using deep learning algorithms for local irradiance, surpassing state-of-the-art models by improving prediction accuracy by over 0.8%.
- Innovated multiple maximum power point tracking techniques for photovoltaic systems utilizing deep reinforcement learning, surpassing the performance of state-of-the-art algorithms by increasing power generation by over 2%.

Adjunct Professor - UMSNH, Mexico Oct 2015 - Aug 2019

Lectured several courses including Digital Electronics, Digital Control, Microcontrollers, and Instrumentation.

EDUCATION

2018 - 2022	Ph.D. in Electrical Engineering at Universidad Michoacana (UMNSH)	(GPA: 4.0/4.0)
2015 - 2017	M.Sc. in Electrical Engineering at Universidad Michoacana (UMNSH)	(GPA: 4.0/4.0)
2009 - 2014	B.Sc. (<i>Hons</i>) in Electronics Engineering at Universidad Michoacana (UMNSH)	(GPA: 3.7/4.0)

LANGUAGES

Spanish (Native), English (C1).

CERTIFICATIONS

Microsoft Certified: Azure Data Scientist Associate	(2024)
DeepLearning AI Deep Learning Specialization	(2024)
Huawei Certified ICT Associate-AI	(2024)
Stanford University & DeepLearning AI Machine Learning Specialization	(2023)
Google Advanced Data Analytics	(2023)

SKILLS

Time Series	Analysis, Modelling, Forecasting
Programming Languages	Python, MATLAB, C, JavaScript, VHDL
Machine Learning Frameworks	PyTorch, TensorFlow, Keras, Scikit-Learn, LightGBM, XGBoost
Deep Learning	NLP, Image Processing, Deep Reinforcement Learning
Big Data Tools	Apache Spark, Databricks
Cloud Platforms	Microsoft Azure, Huawei Cloud
Web Development	HTML5, JavaScript, CSS3
Version Control	Git, GitHub, GitLab
Database Management	SQL, MongoDB
Workflow Management	Apache Airflow, Kedro
Project Management	Agile, Scrum, Kanban, Atlasian Jira

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