Javier Orduz, Ph.D.

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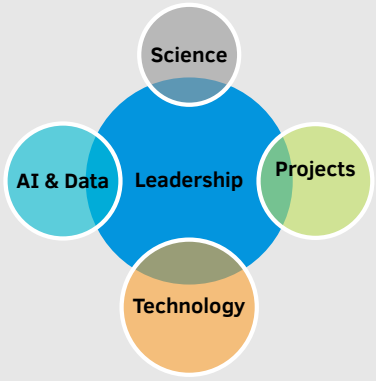
jaorduz

Education

- Ph.D, Applied Physics
BUAP | 2014 | Puebla, Mex.
- MSc., Applied Physics
BUAP | 2010 | Puebla, Mex.
- MSc. Interdisciplinary (Computational) Engineering
Purdue U. 2025- | IN, USA
- BSc., Physics.
UPTC | 2008 | Tunja, Col.

Skills



Programming

0 → 5

IOSX • Linux • Windows

Git

Swift • HTML

Markdown • LaTeX •

Python • C/C++ • Fortran

Professional Summary

Quantum Machine Learning Scientist with a Ph.D. in Physics and 9+ years of experience in academic research and teaching. Proven expertise in developing ML models for scientific data, optimizing simulations, and leading interdisciplinary projects. Passionate about translating deep theoretical knowledge into practical solutions. Seeking to leverage analytical rigor and programming skills in data-driven innovation at a forward-thinking tech company.

Relevant Projects

I explore quantum machine learning and develops cutting-edge algorithms and applications. I actively mentor through the LatinX in AI community, championing underrepresented voices in tech. My work bridges quantum computing, machine learning, and high-energy physics with a deep commitment to empowering emerging talent and advancing science in underserved regions. • Led interdisciplinary research on AI applications in high-energy physics; published in peer-reviewed journals. • Designed and taught advanced machine learning coursework for physics, mathematicians and engineering majors.

Professional Experience

Jul 2022 - present	**Visiting Assistant Professor**	Earlham College. USA
Jan 2022 - 2025	**Adjunct Professor**	Baylor U. USA
Nov 2020 - Jul 2022	**Research Scholar/Postdoctoral Research Scientist**	Baylor U. USA
Feb 2017 - Dec 2020	**Associate Professor**	UNAM, Mex
March 2015 - Feb 2017	**Postdoctoral Researcher**	UNAM, Mex

Technical Skills

• **Quantum and Data Tools:** Qiskit, PennyLane, Pandas, NumPy, Matplotlib, Jupyter **Languages:** Spanish, and English • **Programming** ability to prototype algorithms. • **Communication:** Excellent writing , editing and proofreading skills. • **Collaboration:** Work closely with engineers, researchers, and technical experts to implement solutions. • **Platforms:** Microsoft Teams, Word, Excel, power point. Google Drive, Slack, Discord, LaTeX • **Organization:** project leader, principal investigator, and abilities to coordinate Meetings, scientific and outreach events, deliveries, and final remarks. • **Organization:** Excellent time management, Calendly, Trello. • **Work:** team work, leader, independent and creative.

Publications and Speaking

Driven by a strong interest in engineering and problem-solving, I have actively contributed to advancing applied science through more than 70 international conferences and a growing body of peer-reviewed publications with over 400 citations. My work emphasizes real-world applications of quantum computing, AI, and high-energy physics. It has been recognized through awards such as the APS-Simons Travel & Professional Development Award, SNI Level 1 (Conacyt, Mexico), and a guest researcher position at INAOE. I have designed and led academic programs at both undergraduate and graduate levels across diverse educational settings. I also founded key initiatives including QMexico initiative, ICEQT, and projects such as CTIM project and Quanta Calaverita, all of which aim to democratize access to cutting-edge science and technology.