

Javier Gonzalez-Castillo, Ph.D.

Engineer and Scientist with two decades of cross-sector experience. Specializes in leveraging big data, AI, and domain expertise to deliver insights and solutions that make a difference.

EXPERIENCE

National Institute of Mental Health — Senior Associate Scientist

09/2021 - PRESENT, Bethesda, MD, United States of America

Supervise lab personnel, lead scientific projects, mentor junior scientists, establish external collaborations, review/edit for scientific journals, write scientific publications

National Institute of Mental Health — Staff Scientist

04/2014 -09/ 2021, Bethesda, MD, United States of America

Design/Execute scientific projects in neuroscience, neuroimaging and machine learning; oversee daily lab operations and compliance with NIH policies.

National Institute of Mental Health — Post-doctoral Researcher

12/2009 -04/ 2014, Bethesda, MD, United States of America

Analyze high dimensional medical imaging datasets, design experiments, write scientific publications, lecture at conferences and top-tier research universities around the world.

Hewlett Packard — Associate Consultant

07/2001 -07/ 2004, Madrid, Spain

Project manager for medium size projects (\$50,000 - \$100,000), prepare commercial proposals, lead communications with HP R&D Business Unit.

Hewlett Packard Labs — Research Engineer

07/2000 - 07/2001, Bristol, UK

Researched Semantic Web Technologies and its applications to E-Commerce.

EDUCATION

Purdue University — PhD, Biomedical Engineering

2005 - 2009, West Lafayette, Indiana, United States of America

Research Focus: Functional Neuroimaging Methods

Universidad Politécnica — BS/MS, Telecommunications Engineering

1995 - 2001, Madrid, Spain

PROFESSIONAL CERTIFICATIONS

Quantum Computing Specialization 2025 - Online: Coursera

1) Mathematical Foundations and Quantum Mechanics Essentials; 2) Python for Quantum Computing 3) Quantum Computing with Qiskit & Advanced Algorithms

Quantum Business Foundations Course 2025 - Online: IBM

Natural Language Processing Spec. 2025 - Online: Coursera

1) NLP Sequence Models; 2) NLP Probabilistic Models; 3) NLP Sequence Models.

Deep Learning Specialization 2020 - Online: Coursera

1) Neural Networks & Deep Learning; 2) Hyperparameter Tuning, Regularization & Optimization; 3) Structuring Machine Learning Projects; 4) CNNs; 5) Sequence Models.

Arlington, VA, USA

javiergcas@gmail.com

SKILLS

Exploratory Data Analysis, High Dimensional Data, Data Processing Pipelines

Machine Learning, Deep Learning, Graph Theory, Quantum Information Theory

Problem Solving, Experimental Design, Use Case Selection, Scientific Communication, Mentoring

Python, Shell Scripting, Git, High Performance Computing, Qiskit

Project management, Client Relationships, Consulting

Medical Imaging, Behavioral Data, Neuroscience

AWARDS

Fulbright Fellowship (2004)

Magoon Award for Excellence in Teaching (2008,2009)

Bilsland Dissertation Fellowship (2009)

NIMH Director's Awards in Administrative Excellence (2019/2024)

NIMH Outstanding Mentor Award (2021)

NIMH Special Act Award (2025)

LANGUAGES

Spanish (native), English (fluent), French (beginner)