RODRIGO D. PEREA, Ph.D.

Senior Data Scientist & Healthcare Analytics Expert
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EXECUTIVE SUMMARY

Globally-oriented Senior Data Scientist with 9+ years of experience in healthcare analytics, providing strategic insights that drive business growth and improvement. Expertise in ingesting, transforming, and analyzing complex healthcare datasets (>1M members) to identify opportunities for targeted interventions, risk adjustment, and medical economics. With a strong analytical foundation in statistical analysis, data engineering, and neuroimaging research expertise, I develop and implement data-driven solutions that address complex problems, presenting findings and recommendations to leadership and cross-functional stakeholders.

CORE COMPETENCIES

Strategic Healthcare Analytics:
• Risk Stratification
• Population Health Analytics (>1M members)
• Targeted Interventions
• Value-Based Care Performance Analytics
• Chronic Condition Management Strategy
• Business Growth & Revenue Optimization

Advanced Data Science:
• Python, R, SQL, Spark, Databricks
• AWS Redshift, S3
• Machine Learning & Predictive Modeling
• ETL/ELT Pipelines
• Statistical Analysis
• A/B Testing & Experimental Design
• Healthcare Data Governance (HIPAA)

Executive Leadership:
• Cross-functional Stakeholder Management
• Strategic Analytics & Business Intelligence
• Lead Dashboard & KPI Development
• Data-Driven Decision Making
• Complex Problem Solving & Innovation

PROFESSIONAL EXPERIENCE

Sr. Data Scientist | Product Lifecycle Analytics and Intervention

Teladoc Health

Aug 2023 – Sept 2025

- Drive strategic business growth through population health analytics for 1M+ member chronic condition management portfolio, delivering actionable insights that optimize revenue and clinical outcomes
- Support, migrate, and develop advanced risk stratification models and medical economics frameworks that reduce organizational risk exposure while identifying high-value intervention opportunities
- Lead cross-functional strategic initiatives with Product, Clinical, UX Design, and Coaching teams to transform member journey analytics into business growth drivers
- Architect dashboards and strategic analytics that guide executive decision-making on product architecture and market expansion opportunities
- Spearhead innovative pilot studies and strategic partnerships that position Teladoc as market leader in population health management and value-based care

Data Scientist III | Connected Devices & ML
Teladoc Health

Apr 2022 – July 2023

- Led critical business initiative to regain CDC recognition, protecting annual revenue stream and positioning Teladoc for competitive advantage in value-based care markets
- Led cross-functional collaboration with Data Engineering to architect scalable data warehouse solutions, optimizing transformation pipelines for near real-time clinical decision support
- Engineered advanced anomaly detection algorithms for healthcare device data streams, enabling strategic insights that improved population health analytics accuracy
- Delivered strategic business impact through comprehensive ML model optimization for Diabetes Prevention Program (DPP), driving measurable improvements in member engagement and revenue retention

Principal Scientist | Machine Learning & Artificial Intelligence
Biogen Digital Health

Jul 2021 – Apr 2022

- Architected advanced MRI segmentation algorithms and pipelines to standardize the assessment of multiple sclerosis across 10 internationally recognized institutions
- Provided strategic domain expertise in medical imaging to advance ML/AI models, enabling data-driven clinical decision support that improved patient outcomes and business value

- Led comprehensive analysis of big data features (segmentations, radiomics) to deliver strategic insights on disease progression and treatment outcomes, informing business strategy
- Built enterprise-scale imaging processing tools that enhanced clinical applications and supported Biogen's competitive positioning in neurodegenerative disease markets

Scientist II - Imaging Specialist
Biogen

Jun 2018 – Jun 2021

- Architected cross-platform infrastructure for medical imaging big data automation, delivering strategic operational efficiency gains that reduced costs and accelerated time-to-market
- Led end-to-end MRI analysis pipelines for multiple sclerosis clinical trials, ensuring regulatory compliance and data quality that supported successful FDA submissions and business growth
- Developed enterprise user interfaces and QA/QC protocols that enhanced medical data management capabilities, serving as strategic technical liaison to external collaborators and partners

Postdoctoral Research Fellow
Harvard Medical School / Massachusetts General Hospital

Jun 2015 – Jun 2018

- Led strategic neuroimaging research initiatives focused on Alzheimer's disease and aging, contributing to NIH-funded studies totaling $5.3M that advanced healthcare analytics and clinical decision support
- Developed innovative statistical and imaging analyses methodologies for large-scale medical datasets (n>400), establishing a better understanding of the disease at early stages
- Authored high-impact peer-reviewed publications and conference presentations that influenced clinical practice and healthcare policy, presenting complex analytical findings to executive-level scientific and clinical stakeholders

EDUCATION

Ph.D. in Bioengineering | University of Kansas | May 2015
Dissertation: "The impact of exercise on brain's white matter in aging and Alzheimer's disease"

M.S. in Bioengineering | University of Kansas | May 2010
Thesis: "Electro-mechanical characterization of piezo-metallic solids for spine implant"

B.S. in Computer Engineering | University of Kansas | May 2007

Postdoctoral Fellowship | Harvard Medical School & MGH | 2015-2018
Specialization: Imaging in neuropsychology and brain connectivity analysis

STRATEGIC RESEARCH LEADERSHIP & FUNDING

NIH Research Portfolio: Co-investigator on $5.3M in federal grants driving strategic healthcare analytics innovation and clinical outcomes research that informed business strategy and market positioning

- P50 AG005134 - "The Role of Genetic Variation in Alzheimer's Disease" ($125K) - Strategic research supporting precision medicine and personalized healthcare analytics
- R01 AG053509 - "Tau, amyloid, & white matter burden in preclinical Alzheimer's disease" ($4.6M) - Large-scale study advancing biomarker discovery and clinical decision support systems
- P01 AG036694 - "Harvard Aging Brain Study" ($91K) - Longitudinal research informing population health management strategies
- K01AG035042 - "Genetic Variation in Alzheimer's Disease" ($580K) - Early career research establishing foundation for healthcare analytics expertise

KEY ACHIEVEMENTS & RECOGNITION

- Recipient of 2024 Teladoc Health Value Awards for exceptional business impact and strategic contributions to population health analytics (1 of 3 recipients company-wide)
- Led strategic CDC compliance initiative protecting annual revenue stream and securing 3-year DPP recognition renewal, positioning organization for competitive advantage in value-based care markets
- Architected ML models supporting 1M+ member chronic condition management portfolio, delivering measurable business growth through improved clinical outcomes and member retention
- Recipient of 2022 Biogen CEO Awards for analytical excellence and strategic innovation in medical imaging and drug development
- Recipient of Institute of Education Full-ride Undergraduate Scholarship recipient, demonstrating exceptional academic and professional potential

- Published 15+ peer-reviewed articles in high-impact healthcare and technology journals, establishing thought leadership and influencing industry standards for healthcare analytics
- International Institute of Education Full-ride Undergraduate Scholarship recipient, demonstrating exceptional academic and professional potential

SELECTED PUBLICATIONS

Perea RD, Rabin JS, Buckley RF, Johnson KA, Sperling RA, Hedden T. Synergism between fornix microstructure and beta amyloid accelerates memory decline in clinically normal older adults. *Neurobiol Aging*. 2019;81:38-46.

Perea RD, Rabin JS, ..., Hedden T. Connectome-derived diffusion characteristics of the fornix in Alzheimer's disease. *Neuroimage Clinical*. 2019;19:331-342.

Jacobs HIL, Hedden T, **Perea RD**, ..., Johnson K. Reduced tract integrity predicts downstream tau accumulation in amyloid positive normal older individuals. *Nature Neuroscience*. 2018;21(3):424-431.