

RESUME

Julián Nicolás Acosta, MD

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CONTACT INFORMATION

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Location: Boston, MA

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Immigration Status: U.S. Permanent Resident

PROFESSIONAL SUMMARY

Medical AI scientist with 40+ publications (Google Scholar h-index: 21), and deep clinical, technical, and regulatory expertise spanning academic and industry roles.

PROFESSIONAL EXPERIENCE

Director of Clinical AI (promoted from Research Associate Feb 2025) **2024–Present**
Rajpurkar Lab, Dept. of Biomedical Informatics, Harvard Medical School

- Developed proof-of-concept voice AI multi-agent system for stroke triage assessment achieving high accuracy and high user confidence
- Built and validated HeadCT-ONE, an automated metric for head CT report generation evaluation using ontology-normalized entity extraction, improving alignment with radiologists' evaluation of head CT reports
- Led evaluation of multimodal AI system for chest x-ray report generation including preference testing and multi-reader AI-enabled reporting studies with 10+ radiologists
- Led scientific ideation and grant writing of NIH R01 proposal, resulting in top 3 percentile score (pending funding)

Scientist (part-time) **2024–Present**
a2z Radiology AI

- Led regulatory interactions with FDA and EU regulatory bodies for AI medical device clearance
- Designed and executed ground truthing and reader studies for validation of radiology AI models

Senior Clinical Research Scientist (promoted from Clinical Data Scientist Jul 2023) **2022–2024**
Rad AI Inc.

- Trained radiology summarization language models using PyTorch in multi-GPU settings on 10M+ radiology reports
- Built company's first large multi-task instruction tuning radiology dataset with >1M examples
- Led the development of a system to detect recommendation text in radiology reports using RoBERTa-based token classification with configurable redaction capabilities for specific radiology guidelines/body parts
- Implemented end-to-end ML pipelines using Metaflow for data processing and Sagemaker for deployment

Postdoctoral Associate **2019–2022**
Department of Neurology, Yale School of Medicine

- Published 10+ papers on stroke genetics, neuroimaging, and cardiovascular health disparities
- Analyzed large-scale datasets (All of Us, UK Biobank) for genomic and epidemiological research

Neurology Resident <i>Fleni, Buenos Aires, Argentina</i>	2015–2019
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EDUCATION

Postdoctoral Fellowship , Yale University School of Medicine <i>Population Genetics / Stroke / Neuroimaging / Machine Learning</i>	2019–2022
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Neurology Residency , Fleni, Buenos Aires, Argentina	2015–2019
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Doctor of Medicine (MD) , National University of the Northeast, Argentina <i>GPA 9.11/10 (US 3.98/4), Magna cum laude</i>	2008–2014
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SELECTED CERTIFICATIONS

CITI Good Clinical Practice	2025
Health Informatics Mastertrack Certificate , Yale University	2021
AI for Medicine Specialization , deeplearning.ai	2020
AI for Healthcare Nanodegree , Udacity	2020

RESEARCH

h-index: 21 | **Publications:** 40+ peer-reviewed articles
Profiles: Google Scholar | PubMed

RESEARCH SUPPORT

NIH R01 Grant (Pending) - Integrating Clinical Knowledge: A Multimodal AI System for Reliable Head CT Understanding and Interpretation
Role: Contributor | PI: Pranav Rajpurkar | Status: Top 3 percentile score | Budget: \$2.4M

SELECTED HONORS & AWARDS

Paul Dudley White International Scholar Award , International Stroke Conference	2022
Mordecai Y. T. Globus New Investigator Award , International Stroke Conference	2022
Paul Dudley White International Scholar Award (Co-author) , International Stroke Conference	2020
Best Presentation in Clinical Physiology , Argentinian Society of Medicine	2013

TECHNICAL SKILLS

Programming: Python (PyTorch, HuggingFace, OpenAI, pandas, scikit-learn), R, SQL
ML/AI: Multi-GPU training, LLMs, computer vision, NLP, model deployment (AWS/Azure)
Clinical Research: Study design, IRB protocols, statistical analysis, scientific writing
Regulatory: FDA 510(k) submissions, EU MDR documentation, Breakthrough Device interactions
Cloud/Data: AWS, Google Cloud, Azure; large-scale datasets (medical images, radiology reports, genomics, EHR)

TEACHING & LEADERSHIP

- **Mentor**, Medical AI Bootcamp, Harvard Medical School (2024–Present)
- **Instructor**, AI Applied to Health Sciences (online), Universidad Nacional del Litoral (2023-2024)
- Mentored 25+ trainees across Harvard, Yale, and Fleni including undergraduates, graduate students, post-docs, and medical residents

LANGUAGES

Spanish (native), English (fluent, TOEFL 112/120)