

# **Matheus Machado** Rech

M.D.

## **Contact Information**

+55 54 9 96921904

mmrech.md@gmail.com

LinkedIn: /in/mmrech/

Caxias do Sul, RS, Brazil

## Languages



Proficient



Portuguese Native

## **Professional ID**



ORCID

ORCID: 0000-0002-2961-9443





# **Academic Background**

#### **Education**

**Doctor of Medicine (M.D.)** University of Caxias

do Sul Caxias do Sul, Brazil 2018 - 2024

## **Research Experience**

**Scientific Initiation Scholarship** 

ProgramUniversity of Caxias do SulFunded by the

National Council for Scientific and Technological Development (CNPq)April 2020 - March 2023

### **Research Focus & Achievements**

A federally funded national research fellowship focused on healthcare innovation and clinical outcomes prediction.



# <>





#### AI/ML Models

Engineered and validated AI/ML models to predict patient outcomes in complex clinical

#### **Data Pipelines**

Constructed robust Python/Matlab data pipelines to simulate uncertainty in healthcare systems

#### **Novel Approaches**

Investigated novel machine learning approaches for predicting natient-specific variability

#### **Technical Reports**

Authored technical reports and presented findings to faculty and the national funding agency





>

Use  $\leftarrow$   $\rightarrow$  arrow keys or click to naviga



## **Professional Experience**

## **Teaching Experience**

#### Neurology / Neuropsychiatry (2022)

60 hours Competitive exam

Supervisor: Marcelo Mattana, MD

Delivered additional lectures and assistance to junior medical students

#### **Human Anatomy (Morphology) (2020)**

60 hours Competitive exam

Supervisor: Fabio Pasqualoto, MD, PhD

Delivered additional lectures and assistance to health-sciences students

#### **Neuroanatomy (2019-2020)**

Competitive exam

Supervisor: Asdrubal Falavigna, MD, PhD

Delivered additional lectures and provided assistance to junior medical and other health-sciences students

#### Surgical Technique & Anesthesia (2020)

60 hours Competitive exam

Supervisor: Marcos Dalponte, MD

Assisted with skills-focused teaching and supplemental lectures

#### **Biophysiology (2020)**

30 hours Competitive exam

Supervisor: Rafael Colombo, PhD

Delivered additional lectures and assistance to health-sciences students

#### Neurophysiology (2019)

Competitive exam 30 hours

Supervisor: Asdrubal Falavigna, MD, PhD

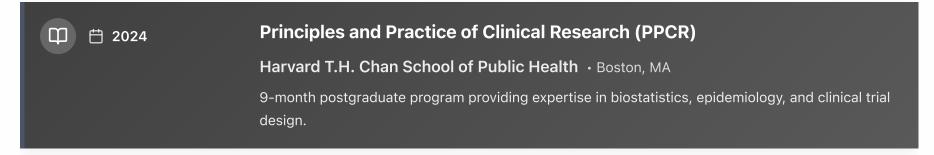
Delivered additional lectures and assistance to junior medical students

## **Leadership & Professional Activities**





## **Continuing Education**



**Continuing Education Program in Research ∄** 2019 **AO Spine Latin America** 

> Intensive training in evidence-based practice, literature search, database management, and manuscript writing.

> > >



## **Service & Activities**

## **Course & Event Organization**

Mayo Clinic School of Continuous Professional Development

Staff, Rhoton-de Oliveira Skull Base Lab Course • Jacksonville, FL • March 2023

## **Voluntary Work**

○ Vine Trust – "Amazon Hope" Medical Program

Volunteer Medical Student • Loreto Region, Peru • January–February 2023

#### **Committee Service**

Student Representative, Medical School Council

University of Caxias do Sul • 2023

Elected Member, Fiscal Council

Gaucho Association of History of Medicine, Porto Alegre • 2020–2024

Elected Student Delegate, National Assembly

Brazilian Association of Medical Education, Brasília • 2020

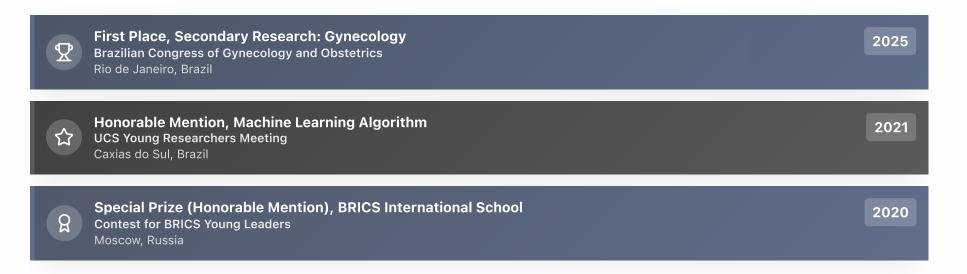




5/8



## **Honors & Awards**



>

6/8

## **Peer-Reviewed Articles**

2025

2024

#### **Peer-Reviewed Articles**

Machine learning models to forecast outcomes of pituitary surgery: systematic review

**Brain Sciences** 2023

Rech MM, de Macedo Filho L, White AJ, et al. Machine learning models to forecast outcomes of pituitary surgery: systematic review....

Development and validation of a machine learning model to predict mortality in cirrhosis with esophageal variceal bleeding

World Journal of Hepatology

Rech MM, Corso LL, Dal Bó EF, et al. Development and validation of a machine learning model to predict mortality in cirrhosis with...

Predicting major adverse cardiovascular events after liver transplantation using supervised machine learning

World Journal of Hepatology

Soldera J, Corso LL, Rech MM, et al. Predicting major adverse cardiovascular events after liver transplantation using supervised... Publication trends of intrathecal baclofen therapy: bibliometric analysis

World Neurosurgery

2024

Rech MM, Ramos MB, Piva FE, et al. Publication trends of intrathecal baclofen therapy: bibliometric analysis. World Neurosurgery....

Author Impact Factor as a metric in neurosurgery World Neurosurgery

2022

Ramos MB, Rech MM, Dagostini CM, Britz JPE, Teixeira MJ, Figueiredo EG. Author Impact Factor as a metric in neurosurgery. World...

Emergency neurological life support in literature: bibliometric study Arquivos de Neuro-Psiquiatria 2024

Ramos MB, Rech MM, Telles JPM, Moraes WM, Teixeira MJ, Figueiredo EG. Emergency neurological life support in literature: bibliometric...



## **Abstracts & Presentations**

