JUAN CARLOS CRUZ GONZÁLEZ

Curriculum vitae

CONTACT INFORMATION

8 Galeana Street, San Vicente Chicoloapan Centro, Edo. Mex. 56370

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www.linkedin.com/in/juan-carlos-cruz-gonzalez-711a9b191/

My website: https://cruzgjuan.com/

SKILLS

Deep learning — 1 year +

Maching learning — 1 years +

Topological data analysis

Maching learning — 1 years +

Mathematics: Modern algebra, algebraic topology, probability and statistics, etc.

LANGUAGES

Spanish — Mother tongue

English — Intermediate

EDUCATION

Degree in mathematics — July 2017
Universidad Autónoma Metropolitana (UAM)

My thesis is about coloring of circulant graphs

Master's degree in Sciences with Specialization in Basic Mathematics — August 2019
Centro de Investigación en Matemáticas, A.C. (CIMAT)

My thesis is about the classifications of 2-stratifolds

PhD in Sciences with Specialization in Basic Mathematics — March 2024
Universidad Autónoma Metropolitana

My thesis is about the generalization of the category of quotient modules and is called Quotient Modules on Continuity Filters. It is the creation of a new line of research in abstract algebra

PROFESSIONAL COURSES

Machine Learning Foundations: A Case Study Approach — 2020
Coursera

Neural Networks and Deep Learning — 2020
Coursera

WORK EXPERIENCES

Technician in Electronic Security Systems — 2014 - 2015
MaxTracker

Installation and programming assistant for CCTV and Access Control systems.

Part-time type "A" teacher — 2016 - 2017
Department of Mathematics of the Universidad Autónoma Metropolitana

My job was to teach mathematics to university students.

Assistant teacher — 2018 - One semester
Centro de Investigación en Matemáticas, A.C.

My job was to teach mathematics to master students.

Part-time type "B" teacher — 2019 - 2021
Department of Mathematics of the Universidad Autónoma Metropolitana

My job was to teach mathematics to university students. Courses like Algebra and linear algebra

UAM curricular teacher — July 2023 - Feb. 2024
Department of Mathematics of the Universidad Autónoma Metropolitana

I am a research professor in the area of non-commutative algebra and category theory.

Universidad Tecnológica Latinoamericana en Línea (UTEL) teacher — July 2022 - present
UTEL México

My job was to teach online Linear Algebra and Algebra to engineering students.

Universidad Abierta y a Distancia de México (UnADM) teacher — July 2023 - June 2024
Division of Exact Sciences, Engineering and Technology

My job was to teach online mathematics classes to students of the UnADM degree in mathematics.. Courses like Discrete Mathematics, Modern Algebra I, Diferential calculus.

Full-time C2 research professor — May 2024 - Dic. 2024
Universidad Autónoma Chapingo

My job consists of teaching 3 mathematics courses per semester and the rest is conducting research in my field of concentration, which is Non-Commutative Algebra.

SCHOLARSHIPS AND AWARDS

scholarship PRONABES — 2013-2017
Math student

I obtained and kept this scholarship for being a regular student

UAM excellence scholarship — 2016
Math student

I got this scholarship for having a GPA above 9.5 in my third year of college.

Scholarship 100% for Math summer school
Centro de Investigación en Matemáticas

I got this scholarship for having a good academic record.

Scholarship 100% for XVI Math summer school
Centro de Ciencias Matemáticas

2016

I got this scholarship for having a good academic record.

100% Scholarship for the school of mathematical analysis
Universidad de Colima

2016

I got this scholarship for having a good academic record.

First place
IV Espartaqueada Nacional de Matemáticas

2016

I got first place

First place
Concurso Nacional de Matemáticas Pierre Fermat

2016

I got first place

CONACYT scholarship for maester's degree
CONACYT

Aug. 2017- Aug. 2019

I had and kept this scholarship for my master's studies since I had a good academic average.

Conacyt scholarship for PhD
CONACYT

Sep. 2019 - Sep. 2023

I still have this scholarship for my good performance as a doctoral student.

PROJECTS AND RESEARCH

QR implementation
first project

November 2022

Implement the QR from scratch

Continuity filters and modules of quotients
First paper

September 2023

It was submitted for review in January 2023 and it was accepted on September 06, 2023 for publication in Journal of Algebra and its Applications.