

JUAN CARLOS CRUZ GONZÁLEZ

Curriculum vitae

CONTACT INFORMATION

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- in 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 topolprobability ogy, statistics, and

LANGUAGES

Spanish Mother tongue

English Intermediate

EDUCATION

Degree in mathematics

Universidad Autónoma Metropolitana (UAM)

My thesis is about coloring of circulant graphs

Master's degree in Sciences with Specialization in Basic Mathematics

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

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

July 2017

August 2019

September 2023

Coursera

Neural Networks and Deep Learning

Coursera

2020

Compilation: April 24, 2024

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 - Enero 2024 Department of Mathematics I am a research professor in the area of non-commutative algebra and category theory. UTEL teacher (for fees) July 2022 - present **UTEL México** My job is to give math classes to engineering students. Courses like Discrete Mathematics, Modern Algebra I UnADM teacher (for fees) July 2023 - present Division of Exact Sciences, Engineering and Technology My job is to give math classes to math students. Courses like Discrete Mathematics, Modern Algebra I SCHOLARSHIPS AND AWARDS 2013-2017 scholarship PRONABES Math student I obtained and kept this scholarship for being a regular student 2016 UAM excellence scholarship 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 2015 Centro de Investigación en Matemáticas I got this scholarship for having a good academic record. 2016 Scholarship 100% for XVI Math summer school Centro de Ciencias Matemáticas I got this scholarship for having a good academic record.

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2016 100% Scholarship for the school of mathematical analysis Universidad de Colima I got this scholarship for having a good academic record. 2016 First place IV Espartaqueada Nacional de Matemáticas I got first place First place 2016 Concurso Nacional de Matemáticas Pierre Fermat I got first place CONACYT scholarship for maester's degree Aug. 2017- Aug. 2019 **CONACYT** I had and kept this scholarship for my master's studies since I had a good academic average. Conacyt scholarship for PhD Sep. 2019 - Sep. 2023 **CONACYT** I still have this scholarship for my good performance as a doctoral student. PROJECTS AND RESEARCH QR implementation November 2022 first project Implement the QR from scratch

First paper

Continuity filters and modules of quotients

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.

September 2023

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