# Jan Alejandro Medina López

Curriculum Vitae

#### Personal data

Nationality Colombian

Birth 9th November, 1989.

#### Contact information

janmedina14@gmail.com

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#### Education

2017 - Doctorate in Engineering and Applied Sciences.

Place Pontificia Universidad Javeriana, Cali, Colombia.

Thesis "Joint Estimation of Formation Mechanisms in Heterogeneous Growing Networks"

Supervisor Jorge Finke.

2016 – 2018 Master in Engineering.

Place Pontificia Universidad Javeriana, Cali, Colombia.

Thesis "Estimating formation mechanisms and degree distributions in mixed attachment

networks"

Grade Mención Honorifica a la Excelencia.

**2007** – **2014 Bsc. in Mathematics**.

Place Universidad del Cauca, Popayán, Colombia.

Thesis "Un criptosistema de clave pública tipo Knapsack basado en conjuntos  $B_h$ "

## Academic positions

2016 – 2017 **Research assistant**, *Centro de Excelencia en Big Data y Data Analytics (CAOBA)*, Pontificia Universidad Javeriana, Cali.

2013 – 2015 **Research assistant**, *Álgebra, Teoría de Números y Aplicaciones: ERM*, Universidad del Cauca, Popayán.

## Teaching experience

2015 – 2016 **Differential Calculus (course for Undergraduate students)**, School of Natural Sciences, Exact and Education, Universidad del Cauca.

## Scholarships and awards

06.2017 Fellowship "Fortalecimiento de Capacidades de las Empresas de Base Tecnológica en TIC del Cauca para Competir en un Mercado Global".

Reason Doctoral studies

Place Pontificia Universidad Javeriana Cali

## Conference presentations

2014 **Álgebra, Teoría de Números, Combinatoria y Aplicaciones Altencoa 6**, San Juan de Pasto, Colombia.

El problema de la suma de un subconjunto y criptografía.

2014 **Álgebra, Teoría de Números, Combinatoria y Aplicaciones Altencoa 6**, San Juan de Pasto, Colombia.

Un criptoanálisis al criptosistema Chor-Rivest.

2013 International Conference on Applied Mathematics and Informatics (ICAMI), San Andrés Island, Colombia.

A knapsack-type public key cryptosystem based on  $B_h$  sets.

# Computer skills

Basic JAVA, C, R, Linux

Intermediate PYTHON, Matlab, Mathematica, LATEX, Microsoft Windows

#### **Publications**

D H Bueno-Carreño and J A Medina López. Implementation of an algorithm to compute the strong apparent distance of bivariate codes. *Journal of Physics: Conference Series*, 1160:012012, 2019.

Jan A Medina, Jorge Finke, and Camilo Rocha. Estimating formation mechanisms and degree distributions in mixed attachment networks. *Journal of Physics A: Mathematical and Theoretical*, 52(9):095001, 2019.

# Languages

Spanish Native tongue

English Intermediate