# Gabriel Tadeo Vázqiez Ballesteros

gabriel.vazquez@cimat.mx

+55 1 445 1089593

# **EDUCATION**

**Mathematics Research Center (CIMAT)** 

August 2018-July 2020

MSc in Computer Science and Industrial Mathematics.

Average 9.3/10

**Metropolitan Autonomous University (UAM)** 

August 2013-July 2018

Bachelor in Computer Science.

Thesis: "Graph Coloring" Average 9.5/10

# **WORK EXPERIENCE**

**Freelance** México, Distrito Federal

Developed Assistant for Dentist that supported

August 2017 – December 2017

- Manage appointments
- Manage inventory
- Manage income

#### **Teaching Assistant at UAM**

México, Distrito Federal January 2018– July 2018

I supported the students by grading and teaching in the following courses: "Introduction to Programming".

"Object-oriented programming", "Analysis and Designed of Algorithms", "Concurrent Programming", "Linear Algebra", "Differential Calculus" and "Integral Calculus".

# MAJOR PROJECTS

# Data Visualization Project in "EcoBici Mexico City"

2018

Through statistical methods using data set of EcoBici, I obtained relevant information about this set and could predict future behaviors using R.

#### Summer technological project under the direction of PhD. Carlos Segura González

2019

We developed a Evolutionary Algorithm for Constrained Optimization to improve the state of the art using C++ and parallelization with CUDA.

#### **Genetic Programming to Epidural Administration**

2019

We developed an algorithm which finds a function to know the distance from the skin to the epidural space using C++ (possible publication).

#### Paper: "Differential Evolution with Explicit Control of Diversity for Constrained Optimization"

2020

We developed a evolutionary algorithm for constrained optimization improving the state of the art using C++.

#### SKILLS

#### PROGRAMMING LANGUAGES

TECHNOLOGIES

6 years: C/C++ CUDA, MPI, OpenMP, SQL, Git 3 years: Java, Python

1 year: R

# **AWARDS**

Computing University Merit Medal (UAM)

#### COURSES

3<sup>rd</sup> Evolutionary Computing School (CIMAT 2018)

2<sup>nd</sup> Workshop in Algorithms and Data Structures (Cimat 2019)

4<sup>th</sup> Evolutionary Computing School (CIMAT 2018)