

# Gabriel Tadeo Vázquez Ballesteros

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## EDUCATION

### Mathematics Research Center (CIMAT)

*MSc in Computer Science and Industrial Mathematics.*

August 2018–July 2020

Average 9.3/10

### Metropolitan Autonomous University (UAM)

*Bachelor in Computer Science.*

August 2013–July 2018

*Thesis: “Graph Coloring”*

Average 9.5/10

## WORK EXPERIENCE

### Freelance

*Developed Assistant for Dentist that supported*

- Manage appointments
- Manage inventory
- Manage income

México, Distrito Federal

August 2017 – December 2017

### 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

6 years: C/C++

3 years: Java, Python

1 year: R

### TECHNOLOGIES

CUDA, MPI, OpenMP, SQL, Git

### 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)