

Romel Aldair Vázquez Molina

Date of Birth: 08/20/2000

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EDUCATION

Instituto Tecnológico de Estudios Superiores de Monterrey Campus Monterrey – Nuevo León, México

“Bachelor of Software Engineering”

Average grade: 98/100 (3.9 GPA)

January 2019-June 2024(Expected
Graduation Date)

Consejo Nacional de Normalización y Certificación de Competencias Laborales – México City, México

“EC0474 – Physical Trainer for health maintenance”

March 2023

Algebra University College – Zagreb, Croatia

“Artificial Intelligence Course”

July 2021

Universität Wien – Vienna, Austria

“Conferences about experimentation and training for software engineering activities”

July 2021

WORK EXPERIENCE

Kumon

Santiago de Querétaro,
Querétaro, México

Math Coach

September 2018 – January 2019

- Encouraged and taught children and teenagers, to develop their skills in mathematics.
- Taught them how to solve difficult problems, by dividing into simple tasks.

RECENT PROJECTS

Github link: <https://github.com/RomelVazquez2008/RomelVazquezProjects>

Software Development for Arca Continental – University Project (Software Construction and Decision Making)

2022

In a team of five members, we develop a dashboard web application for the supervisors training in the Company and a videogame as well in order to apply all the concepts learned around the course.

- Implemented in React (web development), AWS (database), C# and Unity (videogame).
- I designed some assets for the videogame and coded the interaction between them in addition to the database.
- I documented the requirements, design and test case documentation.

Lights Traffic Optimization – University Project (Multi-agent systems)

2021

In a team of four members, we develop a simulation of the implementation of smart lights traffic in one corner of our streets, to reduce the vehicular traffic at some hours

- Implemented in Python, C# and Unity (400 code lines in Python and 300 code lines in C#)
- I designed the car and light traffic agents with the agentPy library.

Lexical Analyzer – University Project (Computational Methods course)

2021

This program processes a sequence of characters in a txt file to identify all the token contained it.

- Implemented in C++ (500 code lines)
- I designed a deterministic finite automaton for the purpose of identifies every input and output.

SKILLS

PROGRAMMING LANGUAGES

Python, C, C++ (2 years of experience)
Matlab, R, Arduino, MIT app inventor, SQL (6 months of experience)
Scheme, Unity (2 months of experience)

LANGUAGES

Spanish – Native language
English – B2 level /EUC score 61 (2021)

AWARDS

I participated in “Olympiad Science Contest” in Physics and
Chemistry categories - 2017
I won 1st place “High School app development” competition. - 2017

I obtained an 80% scholarship from Tecnológico de Monterrey.
 I won 1st place in 10,000m “Queretaro municipal athletics competition” Juvenile Category – 2019
 My teammates and I won 1st place in “Grand Spirit COED Puerto Vallarta” - 2022

INTERESTS

I practiced athletics as a long-distance runner for my university team.
 Currently practicing gymnastics and cheerleading for my university team.
 I like to play strategic videogames, including: Chess, League of Legends, Age of Empires and Civilization.
 I enjoy learning topics about finance and physical health care.

UNNOFICIAL TRANSCRIPT

First Semester	Grade
<ul style="list-style-type: none"> Elective Course Mathematics and Science (Mathematics and Data Science for Decision Making) 	100/100
<ul style="list-style-type: none"> Engineering and Science Modelling 	97/100
<ul style="list-style-type: none"> Computational Modelling of Movement 	98/100
<ul style="list-style-type: none"> Computational Modelling Applying Conservation Laws 	97/100
<ul style="list-style-type: none"> Mathematical Thinking I 	100/100
<ul style="list-style-type: none"> Analysis of the Structure and Properties of Matter 	100/100
<ul style="list-style-type: none"> Computational Thinking and Programming 	100/100
Second Semester	
<ul style="list-style-type: none"> Computational Biology Analysis 	99/100
<ul style="list-style-type: none"> Elective Course Ethics and Citizenship (Ethics and Psychology: From Self-Knowledge to Fullfillment) 	93/100
<ul style="list-style-type: none"> Physical Experimentation and Statistical Thinking 	97/100
<ul style="list-style-type: none"> Computational Modelling of Electrical Systems 	97/100
<ul style="list-style-type: none"> Computational Modelling of Electromagnetic Systems 	89/100
<ul style="list-style-type: none"> Intermediate Mathematical Modelling 	100/100
<ul style="list-style-type: none"> Statistic Analysis 	100/100
<ul style="list-style-type: none"> Modelling of Engineering with Computational Mathematics 	99/100
<ul style="list-style-type: none"> Object-Oriented Programming 	100/100
Third Semester	
<ul style="list-style-type: none"> Elective Course Social and Behavioral Sciences (Anthropology of the Body) 	97/100
<ul style="list-style-type: none"> Analysis of Differential Equations 	100/100
<ul style="list-style-type: none"> Implementation of the Internet of Things 	100/100
<ul style="list-style-type: none"> Programming of Data Structures and Fundamental Algorithms 	100/100
<ul style="list-style-type: none"> Modelling of Minimum Systems and Computational Architectures 	99/100
<ul style="list-style-type: none"> Analysis of Software Requirements 	100/100
<ul style="list-style-type: none"> Exploration Topic (Social Entrepreneurship) 	98/100
Fourth Semester	
<ul style="list-style-type: none"> Elective Course Humanities and Fine Arts (Art Appreciation) 	100/100
<ul style="list-style-type: none"> Device Interconnection 	99/100
<ul style="list-style-type: none"> Implementation of Computational Methods 	100/100
<ul style="list-style-type: none"> Software Construction and Decision Making 	100/100
Fifth Semester	
<ul style="list-style-type: none"> Modeling of Multi-Agent Systems with Computer Graphics 	100/100
<ul style="list-style-type: none"> Analysis and Design of Advanced Algorithms 	100/100
<ul style="list-style-type: none"> Integration of Computer Security in Networks and Software Systems 	94/100
<ul style="list-style-type: none"> Elective Course Leadership, Entrepreneurship and Innovation (Anticorruption in Government, Firms, and Society) 	100/100
Sixth Semester	
<ul style="list-style-type: none"> Software Development 	In Progress