# Avila Pérez Rosa Vianey

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State of Mexico, Mexico

# **EDUCATION**

- Technical Degree. Electrical Control Systems CECyT No. 3 "E.R.R" 2013-2016 | State of Mexico, Mexico
- B.S. Physics National Autonomous University of Mexico August 2017 - Present | Mexico City, Mexico

# PROJECTS

• CdeCMx Challenge: Health and Environmental Impact

Sentiment and Geospatial Analysis of COVID-19 Tweets and the amount of cases per day in Mexico were compared, in order to find the link between both. Data Science in Python, HTML and CSS 2020 | Website, Github

• FlowChecked

It aims to be the first step towards an airflow simulation to predict the propagation of airborne viruses in closed spaces. The simulation was built using the Navier-Stoke equation and the finite difference method. JavaScript, HTML and CSS

2020 | Website, Github

Pink Code

The project consists of a convolutional neural network (CNN) which can tell the breast density of the patient and even tell if the type of breast cancer is benign or malignant.

Artificial Intelligence in Python, HTML and CSS 2020 | Website, Github

# EXPERIENCE

• CONAMAT

Physics and mathematics teacher | State of Mexico, Mexico

Enhanced students learning by patiently teaching them topics which are usually consider to be difficult. 2016-2018

### SKILLS

#### • Programming

Python: Object Oriented Programming, Artificial Intelligence, Data Science | C: Functional Programming | Basics of Web Development: HTML, CSS, JavaScript.

# • Tools and Utilities

Git, Github, Excel, LATEX, Bash

#### Languages

Spanish (native) | English (advanced) | German (beginner)

# **AWARDS & RECOGNITION**

- CdeCMx Challenge: Health and Environmental Impact 2020 | 1<sup>st</sup> place
- UCSD COVID-19 Data Challenge: Life and Work in Border Communities | FlowChecked
  2020 | 3<sup>rd</sup> place
- Estee Lauder Companies Virtual Hackaton 2020
- Introduction to Data Science in Python, University of Michigan. Coursera Course. September 2020 | 97/100
- Programming Foundations with JavaScript, HTML and CSS, Duke University. Coursera Course. July 2020 | 100/100
- Introduction to HTML5, University of Michigan. Coursera Course.
  September 2020 | 100/100

# **OTHER HIGHLIGHTS**

- Member of a group of female science students seeking to improve opportunities for women and girls in STEM. Website
- Member of a group of science students seeking to help any math student to have a better comprehension of mathematical concepts using animations. Youtube Channel