

# JOAQUIN VILA

## COMPUTER SCIENCE AND TECHNOLOGY

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### PROGRAMMING LANGUAGES

- Proficient: Java, C
- Intermediate: JS, Python, C#, C++, Elixir
- Basic: PHP

### TECHNOLOGIES

HTML, CSS, SQL, Git, GitHub, phpMyAdmin, MySQL, Linux, Apache, Node.js, Angular, Docker, APIs, Selenium, GeoJSON, Leaflet, Redis, GraphQL, PostgreSQL, Unity

### EDUCATION

#### INSTITUTO TECNOLÓGICO DE MONTERREY (ITESM) (2017 – present) Graduating 2022

Computer Science and Technology BSc

##### Notable Modules:

- Web development
- Software engineering
- Object Oriented Programming

##### Societies:

- Competitive programming club: Solved logical and mathematical problems through programming against other contestants.
- Hackathon Major League Hacking (MLH) Competition: Developed augmented reality software for interactive marketing in under 36 hours competing with other teams.

### MAJOR PROJECTS

#### LIVE COVID-19 WEB MAP (Jan 2021 – Jun 2021)

- Developed a web page featuring a map with the number of active Covid-19 cases across the United States. Data is updated every 24 hours through APIs.
- Led and organized team, proposed initial idea, used Angular framework, APIs, Redis DB cache, Docker and Linux server.
- <https://github.com/JoaquinVila13/covid19-map-api/blob/master/Presentation.pdf>

#### CULTURAL EDUCATION WEB APP (Aug 2020 – Dec 2020)

- Developed web app to help tourists and migrants better adapt to the local culture and customs of a new country using a gamified quiz system.
- Proposed initial idea and implementation strategy, managed project and team from inception to completion, programmed in JS, HTML and CSS, presented final product.
- <https://github.com/JoaquinVila13/easyCulture/blob/master/Presentation.pdf>

#### VR ELECTRIC MOTOR TRAINING SIMULATOR (Aug 2020 – Dec 2020)

- Developed 3D VR simulation used to research replacing physical training with VR, teaching students how to connect wires inside a motor.
- Proposed implementation, led and organized team, programmed in Unity and Google VR, manipulated 3D models, presented final product.
- <https://github.com/JoaquinVila13/VR-motor-simulator/blob/master/Presentation.pdf>

### **VIDEOGAME FOR CEREBRAL PALSY REHABILITATION IN CHILDREN** (Jul 2019 – Dec 2019)

- Developed 2D videogame which promotes active movement in children with cerebral palsy to help in their recovery therapy while having fun.
- Proposed initial idea and implementation strategy, led and organized team, programmed in Unity, designed game mechanics, created and animated 2D sprites.
- <https://github.com/JoaquinVila13/game-therapy/blob/main/Presentation.pdf>

### **AUGMENTED REALITY ADVERTISING APP** (Mar 2019)

- Developed mobile AR app to bring 2D posters to life with 3D pop-out graphics when viewed through a smart device.
- Proposed initial idea, led and organized team, programmed in Unity and Vuforia AR, manipulated 3D models, presented final product to judges, developed in under 36 hours.
- <https://github.com/JoaquinVila13/AR-add-hackathon/blob/main/Presentation.pdf>

## **WORK EXPERIENCE**

### **EDUCATION MENTOR** Aug 2018 - Aug 2019

#### **PREPANET**

Online IT mentor for an educational program aimed at young people and adults in a situation of social inequality, thus contributing to the reduction of the educational gap.

## **CERTIFICATIONS**

- Introduction to Virtual Reality - Coursera (2020)
- Programming for Everybody (Python) - Coursera (2020)

## **SKILLS**

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|--------------------------------------|----------------------|
| • English (Full working proficiency) | • Project Management |
| • German (Intermediate)              | • Responsibility     |
| • Spanish (Native)                   | • Creativity         |
| • Leadership                         | • Communication      |
| • Teamwork                           | • Problem solving    |