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

TECNOLÓGICO DE MONTERREY UNIVERSITY (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)

- Voluntarily 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

- English (Full working proficiency)
- German (Intermediate)
- Spanish (Native)
- Leadership
- Teamwork

- Project Management
- Responsibility
- Creativity
- Communication
- Problem solving