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Johan Sebastian Medina Reyes

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320 627 8750 Portfolio

Education

Mechatronic Engineering 2019 - Present
Universidad Militar Nueva Granada
Higth School 2018
Corporación Colegio Américas Unidas

Professional Profile

As a student in the last semester of Mechatronic Engineering, my career is characterized by the application of development platforms and solid computer skills. I stand out for my ability in team leadership, having successfully served as a Sectional Leader of Desafio Escalar in the Red Cross. In this role, I have honed operations improvement and effective collaboration in multi-disciplinary environments.

In pursuit of internship opportunities, I aspire to apply the knowledge and skills gained during my training to drive entrepreneurial projects. My proactive approach and innate willingness to learn allow me to adjust with agility to project demands and approach new challenges with professionalism and commitment.

- Decision-making skills
- Assertive and effective communication
- Facilitation and coordination
- Efficiency in managing multiple tasks and effective work under pressure.
- Ability in autonomous work and self-management

Technical Skills

Program in Language: C#, C++, Java, Python, JavaScript, HTML, CSS, IEC , LaTeX
Tools: Git, GitHub, VS Code, SolidWorks, MatLab, Excel, Power BI, MySQL, MongoDB, EasyEDA, TiaPortal
Languages: Spanish Native, English B1

Recent University Projects

SQL & NOSQL | *MySQL, MongoDB Compass, MongoDB Atlas, Power BI*

- I led the development of a SQL and a NoSQL database focused on the management of student body, faculty and academic records information. At the same time, I designed a control panel in Power BI to perform visual analysis of the data extracted from the respective databases. This made it possible to present information in an orderly and clear manner, simplifying informed decision making based on this data.

Electric Traction Vehicle (EVT) | *SolidWorks, Python*

- I designed and developed a 6-speed sequential mechanical transmission for vehicle traction. Controlling the force and speed of the vehicle, and performed assembly simulations and stress analysis on the system.
- I carried out the manufacture of the mechanical parts needed for the gear system.These changes were controlled by a servomotor programmed in Python, managed from a Raspberry Pi 4.

3D Vision Through Virtual Reality | *Python, SolidWorks*

- I designed and developed an application for obtaining images of a scene from multiple angles, with the purpose of combining them into a single image. This resulting image enables visualization techniques such as anaglyphs, parallax, cross-view and top-down vision.
- Design and development of glasses for 3D vision using anaglyphs.

Recent Personal Projects

SQL | *MySQL, Power BI*

- Design and development of a database to monitor and control the number of active and inactive volunteers in the Red Cross. Implementation of validations for the calculation of monthly, quarterly and annual volunteer hours.
- Development of a reporting system detailing individual volunteer activities, as well as consolidated reports by youth clust.

Experience

Desafío Escolar Sectional Leader | *Voluntario* 2021 - Present
Colombian Red Cross, Cundinamarca and Bogota Sections

SolidWorks Tutor | *Tutor* 2021 - Present
Personal SolidWorks tutor at the university, providing individualized support to students facing challenges with mastering the design software.

Gran Esquina Llanera | *Cashier and Waiter* 2021
Experience in dual roles of cashier and server, providing friendly and efficient service and transaction accuracy in a busy restaurant environment.