Carlos Simon Amador Izaguirre

Guadalajara, Jalisco | samador0208@gmail.com | https://www.linkedin.com/in/simon-amador/

Education

Tecnológico de Monterrey | Guadalajara, Jalisco, Mexico
Bachelor of Science (B.S.) in Biomedical Engineering　　　　　　　　　　　　　**08/2020 – 06/2024**

- GPA: 92.2/100

Experience

Harvard Medical School / Boston Children's Hospital | Boston, Massachusetts, USA
Research Intern – Fetal Neonatal Neuroimaging and Developmental Science Center　　**07/2023 – 01/2024**

- Processed around 2 MRI images/week at the Fetal Neonatal Neuroimaging and Developmental Science Center (FNNDSC) for 6 months, resulting in 50 images from 4 different datasets for a brain development study.
- Assessed and improved the current framework for MRI analysis using artificial intelligence, including the design and training of a new MRI resolution model in 3 weeks, pending evaluation.
- Structured the schedule for a 4-month-long research project regarding anomaly detection, accounting for a 4-member team.
- Designed, trained, and evaluated 2 innovative models to analyze anomalies in MRI images using artificial intelligence architectures, resulting in models providing valid analysis in 3 out of 3 metrics.

Tecnológico de Monterrey | Guadalajara, Jalisco, Mexico
Undergraduate Research Assistant – Advanced Cyberphysical Systems Laboratory　　**08/2022 – 06/2023**

- Adapted 1526 recordings over 4 months through Python aiding a brain-computer interface technology lab research project.
- Managed a project on the design of 6 models to analyze muscle signal data of 500 registers in 3 months, resulting in the recommendation of an optimal model for in-lab processing.
- Led a 3-person team in a project assessing 2 pre-processing tools for 4 different analysis techniques over 4 months, resulting in a thorough recommendation for pre-processing techniques for a doctoral dissertation project in the lab.

Tecnológico de Monterrey | Guadalajara, Jalisco, Mexico
Research Intern – Biomechatronics Laboratory　　　　　　　　　　　　　　　　**08/2022 – 12/2022**

- Contributed to a gait analysis study, collaborating with MIT and Tecnológico de Monterrey. Recorded precise data for over 10 subjects using motion capture technology.
- Automated data processing using Python code, streamlining data evaluation procedures, and reducing operations time by 50% compared to traditional methods. Enabled efficient extraction and organization of key metrics.
- Delivered comprehensive reports to MIT researchers in 2 months, including statistical analysis and 4 visualizations. Assisted in interpreting and evaluating prosthesis socket designs.

In Business | Lima, Lima, Peru　　　　　　　　　　　　　　　　　　　　　　**01/2021 – 04/2021**
Commercial Assistant

- Prospected 3 potential clients per week, resulting in a 20% increase in new client acquisitions within the first quarter, through client outreach and interaction, for a financial consulting company based in Lima.
- Implemented solutions for operations by efficiently scheduling appointments, optimizing time management for the sales team, and increasing their productivity by 15%.
- Provided valuable support in management through various tasks, including data analysis, report generation, and project coordination, ensuring smooth workflow, and enabling timely decision-making.

Projects

TheiaVision | Guadalajara, Jalisco, Mexico　　　　　　　　　　　　　　　　　**01/2023 – Present**

- Founder of a social start-up consisting of point-of-care screening technology to prevent diabetic retinopathy through a B2B model.
- Led the ideation stage for a 3-member team, conducting the market analysis and strategic planning of the company.
- Elaborated the impact, sales, and business models for the start-up in preparation for the HultPrize Tec de Monterrey OnCampus competition, for which we were selected as finalists out of more than 30 projects.

Skills

Relevant Certifications: Applied Data Science with Python Specialization (University of Michigan), Agile Project Management (University of Colorado Boulder), and Introduction to Structured Query Language (University of Michigan).

Technical Skills: Agile, AI, Analytical skills, AWS, BI Tools, Data science, ETL, Machine learning, Microsoft Excel, Microsoft Power BI, Microsoft PowerPoint, Microsoft Word, MySQL, Python, R, Relational databases, Research skills, Scrum, Statistics, Strategic thinking, Visualization.

Languages: Spanish (Native), English (IELTS 8), German (A2).