ARTURO MONCADA-TORRES Biomedical Data Scientist

블 February 15, 1988



Mexican



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PROFILE

- Driven by improving people's health through the practical implementation of data-driven solutions using machine learning and artificial intelligence tools.
- Strong problem-solving and critical-thinking capacities, proven by the successful completion of numerous research studies in diverse areas of medical technology.
- Efficient interpersonal communication skills leading to collaborations with members of diverse multidisciplinary backgrounds (e.g., scientists, health professionals, technicians, engineers) across different teams, research groups, and institutions.
- Solid scientific analytical skills and data analysis abilities as evidenced by the authorship of several peer-reviewed papers and panel-reviewed research presentations.

http://www.arturomoncadatorres.com/cv @



EXPERIENCE

IKNL @ (NL) 2018 - Today

Clinical Data Scientist

Designed, developed, and implemented machine learning- and Al-based frameworks based on data from the Dutch National Cancer Registry (NCR) to predict patient survival, improve treatment, and support decision-making processes in oncology.

Developed and implemented distributed learning applications for verticallypartitioned data to predict outcomes while preserving patient privacy. **Guided, managed, and supervised** master's/PhD students through their theses.

KU Leuven @ (BE) 2014 - 2018

Doctoral Researcher

Designed, developed, and implemented physiologically-based computational models of different auditory processes and implantable hearing prosthesis in normal hearing \mathscr{O} , hearing impaired \mathscr{O} , and listeners with cochlear implants \mathscr{O} . In collaboration with Danmarks Tekniske Universitet (DK)

Guided, managed, and supervised master's students through their theses. Organized and coordinated scientific meetings, conferences, workshops, and outreach activities for specialized and general audiences. Marie Curie scholarship for Early Stage Researchers

SinTrafico @ (MX) 2012

Mid Data Scientist

Developed a data mining-based framework to collect and analyze real-time traffic data to optimize travelling routes by identifying events and bottlenecks.

ETH Zurich & (CH) 2011, 2013

Research Assistant

Implemented a machine learning-based algorithm for movement classification using wearable sensors' (accelerometer, gyroscope, barometer) data of healthy and stroke participants with an accuracy of >90% \mathscr{O} . Designed experiment, collected, and analyzed inertial sensor data to quantify

white cane usage to improve travel aids of visually impaired people \mathscr{E} .



ETH Zürich (CH) 2012 - 2014

Master of Science in Biomedical Engineering (Cum Laude) Focused on Bioimaging (MRI) and Medical Image Analysis

MSc Thesis: MR Measurements of Dynamic Changes in Aortic Vessel Area and Pulse Wave Velocities Induced by Simulated Obstructive Apnoea Semester Thesis: Image Interpolation for Reconstruction of 4D MRI Data

In collaboration with U. of Basel (CH) Excellence scholarship for Master's studies

U. Iberoamericana (MX) 2007 - 2011

Bachelor of Science in Biomedical Engineering (Summa Cum Laude) Major in Instrumentation

Thesis: Activity Classification in Healthy Subjects Using an Enhanced IMU In collaboration with ETH Zürich (CH)

Developed the hardware and signal processing algorithms for a home control system based on electrooculography. National Instruments University Challenge first national prize \mathscr{O} .

Excellence scholarship for Bachelor's studies





PROGRAMMING + INFORMATICS



MATLAB MS Office LabVIEW

LaTeX R C



Git



LANGUAGES



Spanish (native) English



Dutch (studying) French



German Czech Italian



M KNOWLEDGE

Machine learning + Al Computational modelling Human anatomy + physiology Algorithm development Data processing, analysis, and visualization (Medical) image analysis



SPECIAL ABILITIES

Focused attention to detail Out-of-the-box thinking Fast learner driven to action Team leader + team player Interdisciplinary communication Project management



EXTRACURRICULAR ACTIVITIES

Community manager

Engaged with and generated content for social media audience.

ExpORL, ETH BEEZ

Student society delegate

Represented students at university academic councils; organized events.

ETH Zurich, U. Iberoamericana

HOBBIES

Mid-distance running Volleyball

Indoor, beach

Dancing

Latin, swing, ballroom

Cooking and baking