Jaime Yair Pérez-Tezoco

✉ jypereztezoco@gmail.com ◇ ⊘ +52 272 164 8587 ◇ in LinkedIn ◇ ⊕ WebSite

STRENGTHS

Technical
- **Machine Learning:** Classification, Regression, Clustering, Dimentionality Reduction
- **Data analytics:** Cleaning, Manipulation, Visualizations
- **Optimization:** Linear, Convex, Discrete, Robust, Stochastic, Multi-objective
- **Simulation:** Discrete Event Simulation (DES), Monte Carlo

Software

Confortable with: Python (seaborn, matplotlib, scipy, numpy, keras, Sklearn, TensorFlow)
CPLEX, Gurobi, SIMIO, AnyLogic, Excel, LaTeX

Still improving: SQL, Tableau, Julia, Rstudio, Apache Spark

EDUCATION

Tecnológico Nacional de México - Instituto Tecnológico Orizaba Veracruz, México

Master of Engineering, Industrial Engineering (Area: Decision Analysis) *Aug 2019-Dec 2021*
Average: 95.62/100

Bachelor of Engineering (Licenciatura), Industrial Engineering *Aug 2014-Dec 2018*
Average: 94/100

University of Jyväskylä Finland

Summer School. Courses in Computational Sciences. [pdf transcripts] *Aug 2021*
- COM1: Stochastic Optimization - Models, Algorithms and Applications (3 ECTS gained).
- COM3: Multicriteria Design Optimization in the Age of Data Science (4 ECTS gained).

University of Arkansas Fayeteville, AR 72703

Long term English Program. [pdf] [pdf] *Oct 18th, 2021 - May 27th, 2022*
- I was awarded with the Fulbright-García Robles scholarship to participate in this program.
- I volunteered as part of the student council program during the first term.

RELEVANT COURSEWORK

Bachelor's	Master's
- Statistical Inference I & II	- Artificial Intelligence
- Operations Research I & II	- Advanced Operations Research
- Economics; Financial Planning; Cost Management	- Economic Analysis
- Prob. and Sta.; Statistical Quality Control	- Logistics and Supply Chain
- Operations Management I & II	- Statistics
- Marketing; Project Management	- Decision Analysis
- Systems Simulation; Algorithms and Programming	- Simulation; Operations Management

SUBMITTED PAPERS

[1] ***Hospital reconversion in response to the COVID-19 pandemic using simulation (DES) and multi-objective genetic algorithms***, with Alberto Alfonso Aguilar-Lasserre, Constantino Gerardo Moras-Sánchez, y Carlos Francisco Vázquez-Rodríguez (*submitted to Computers and Industrial Engineering, Impact factor: 5.431*).

[2] ***Optimal design of temporary care centers in response to a sanitary contingency using multi-objective genetic algorithms***, with Alberto Alfonso Aguilar-Lasserre, y Carlos Francisco Vázquez-Rodríguez (*Soon to be submitted*).

[3] ***Evaluation of drug-drug interaction in the treatment of SARS-CoV-2 patients using artificial neural networks***, with Alfonso Aguilar-Lasserre, Ramiro Meza-Palacios, Diana Fernanda Torres-Martínez, Norely Raquel Escobar-Merino, Hugo Vásquez-González, Carlos Francisco Vázquez-Rodríguez (*submitted to Revista del centro de investigación de la Universidad de la Salle, revista de índice CONACyT*).

RESEARCH EXPERIENCE

Instituto Mexicano del Seguro Social (IMSS) Orizaba General Hospital
Operations Analyst Intern *Apr 2020 - Sep 2021*

- Collaboration project with the IMSS Hospital Regional de Orizaba to face the pandemic caused by SARS-CoV-2.

- Multi-objective mathematical models were developed to address the hospital reconversion problem and the design of temporary care centers.

Universidad Autonoma del Estado de México, Graduate Department of Computer Science
Analysis and design of signals through numerical integration. [pdf] *Aug-Dic 2018*

- Project for participation in the Summer of Scientific Research of the Mexican Academy of Sciences and extended for a bachelor dissertation topic.

- i) Direct current motor signals and ii) heart rate signals were analyzed using different mathematical approximation methods.

PROFESIONAL EXPERIENCE

Transportes Especializados de Cordoba CARUS ABELLA
Logistics and Transportation Intern *Aug-Dic 2018*

AWARDS

- Long term English program sponsored by COMEXUS; I was awarded by COMEXUS-Fulbright to participate in this English program.
- Master's degree with Honorable Mention, the highest distinction awarded to students with outstanding performance in the TecNM system. December 10th, 2021.
- Master's degree scholarship, Awarded by the National Council of Science and Technology (CONACyT), 2019-2021.
- French scholarship and mobility preparation, I was awarded by the embassy of France in México to participate in a French language course completing levels A1.2, A1.3, and A2.1 at IFAL, the latter is equivalent to a basic intermediate level.
- Courtesies for attending courses:
  - *Escuela de Modelación y métodos numericos*, awarded by CONACyT-CIMAT [pdf] [pdf]
  - International Meeting on Artificial Intelligence and its Applications, awarded by CONACyT Artificial Intelligence Consortium

MISCELLANEOUS

Enjoy playing sports: running, swimming, biking
Music: play guitar, electric bass, and piano

LANGUAGES

Spanish: Native
English: Fluent (DET 120 points; TOEFL: 583 points [pdf]; MichiganTest: >80 pts (C1 level [pdf]))
French: Basic (A2.1).

REFERENCES

Alberto Alfonso Aguilar-Lasserre ◇ alberto.al@orizaba.tecnm.mx
Tecnológico Nacional de México - Campus Orizaba
Profesor - Researcher of the Master in Industrial Engineering and PhD in Engineering Sciences
Member of the National Research System (SNI) Level 1
GoogleScolar

Carlos Francisco Vázquez-Rodríguez ◇ carlos.vazquezr@imss.gob.mx
Mexican Institute of Social Security - IMSS Head of Medical Benefits
Member of the National Research System (SNI) Level 1
GoogleScolar

Cuauhtemoc Sánchez-Ramírez ◇ csanchezr@orizaba.tecnm.mx
Tecnológico Nacional de México - Campus Orizaba
Profesor - Researcher of the Master in Industrial Engineering and PhD in Engineering Sciences
Member of the National Research System (SNI) Level 2
GoogleScolar