Evelyn Patricia Gutiérrez Ayala

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Education

- 2019-Today Ph.D. Candidate in Engineering, Pontificia Universidad Católica del Perú (Pontifical Catholic University of Peru, PUCP), Lima-Peru in cotutelle with Université d'Orléans (UO), Orléans-France.
 - Thesis project: "Chronic wound monitoring based on thermal and color images from a portable device," under supervision of PhD. Benjamín Castañeda (PUCP) and PhD. Sylvie Treuillet (UO)
 - 2015–2016 M.Sc. in Statistics, Pontificia Universidad Católica del Perú (Pontifical Catholic University of Peru), Lima, Peru.
 - M.Sc. Thesis: "Estimation of the disease prevalence when diagnostic tests are subject to classification error: Bayesian Approach", under supervision of PhD. Giancarlo Sal y Rosas
 - 2006-2011 B.Sc. in Science with a major in Statistical Engineering, Universidad Nacional de Ingeniería (National University of Engineering), Lima, Peru, Placement: A+, First place.

Teaching Experience

- 2017 Today Lecturer, Pontifical Catholic University of Peru, Lima, Peru.
 - In charge of the theory, practice and laboratories hours of the following undergraduate courses:
 - Semester 2020-II: 1IBM18 Profesional Development in Bioengineering 2
 - Semester 2019-I: EST218 Statistics for engineering (Theory and practice)
 - Semester 2018-I: 1INF07 Numerical Experimentation (Theory and practice)
 - Semester 2017-II: 1INF07 Numerical Experimentation (Theory and practice)
 - Aug, 2019 Instructor, Pontifical Catholic University of Peru, Lima, Peru.
 - Sept, 2019 Specialization program: Diploma in Applied Statistics
 - Basic statistical procedures, in SPSS
 - Jun, 2018 Instructor, PeruStat, Lima, Peru.
 - Aug, 2018 In charge of the theory and practice in R.
 - Data Analysis with R
 - 2015–2017 **Teaching Assistant**, Pontifical Catholic University of Peru, Lima, Peru.
 - Semester 2017-I: 1EST10 Introduction to statistics and probability
 - Semester 2016-II: EST225 Regression analysis
 - Semester 2015-I: EST145 Statistics

Research Experiences

- Oct, 2019 **External Researcher**, Université d'Orléans, PRISME, under supervision of Aug, 2020 PhD Sylvie Treuillet.
 - Reseach work for the H2020-MSCA-RISE STANDUP project which proposes to develop a mobile, user-friendly, accurate and low-cost system to detect diabetic foot problems at an early stage and better prevent and cure ulcers.
 - In charge of the data acquisition at the Regional Hospital of Orléans.
- Aug, 2019 **Research assistant**, Pontifical Catholic University of Peru, Medical Image Mar, 2020 Laboratory, under supervision of PhD Benjamín Castañeda.
 - Planning and organization the acquisition protocol and data analysis in the biomedical study: Research on tissue characterization methods using quantitative ultrasound techniques.
 - Development of tools (software) for data analysis and visualization and collaboration in research paper writing.

Consultancy and Professional Experience

Mar, 2015 - **Data Scientist/Modelling Specialist**, *Modelling Team*, LenddoEFL (EFL-Oct, 2018 Global S.A.C.), Lima, Peru.

Highlighted contribution:

- Creation of various predictive models, from simple statistical models to machine learning models, using psychometric, metadata, geolocation data and unstructured data sources: email, SMS, mobile and android data.
- Jan, 2014 Consulting Analyst, Analytics and Data Mining Team, Business Analytics Mar, 2015 S.A.C., Lima, Peru.

Highlighted contribution:

- Predictive modeling and data analysis for different projects using big data and geolocation data.
- Sep, 2011 Credit Risk Analyst, Analytics Team, Entrepreneurial Finance Lab EFL-Dec, 2013 Global S.A.C., Lima, Peru.

Highlighted contribution:

 Descriptive data analysis, reporting and automatizing of data extraction, cleaning and validation.

Publications

- Gutierrez E., Castañeda B., Treuillet S, (2020) "Correction of Temperature Estimated from a Low-Cost Handheld Infrared Camera for Clinical Monitoring" Correction of Temperature Estimated from a Low-Cost Handheld Infrared Camera for Clinical Monitoring, Advanced Concepts for Intelligent Vision Systems (Vol. 12002, pp. 108–116). Springer International Publishing
- Naemi, R., Romero Gutierrez, S. E., Allan, D., Flores, G., Ormaechea, J., Gutierrez, E., Casado-Pena, J., Anyosa-Zavaleta, S., Juarez, M., Casado, F., Castaneda Aphan, B, (2020) Diabetes Status is Associated With Plantar Soft Tissue Stiffness Measured Using Ultrasound Reverberant Shear Wave Elastography Approach, Journal of Diabetes Science and Technology

Conference Presentations, Invited Talks, and Posters

- Feb 2020 **Conference presentation**, 'Correction of Temperature Estimated from a Low-Cost Handheld Infrared Camera for Clinical Monitoring', Presentation at ACIVS Conference, Auckland-New Zealand.
- Jun 2019 **Poster**, 'Estimation of the disease prevalence when diagnostic tests are subject to classification error: bayesian approach', Presentation at Latin American Bayesian Congress (COBAL), Lima-Peru.

Academic Awards

- 2019 Scholar, Scholarship Paul Rivet 2019, Academic Direction of Institutional Relations (DARI) of the Pontifical Catholic University of Peru 12,000 EUR to finance participation in the doctoral program.
- 2016 Scholar, Graduate Student Research Support Program, Research Management Direction (DGI) of the Pontificia Universidad Católica del Perú 10,000 PEN incentive for specialized research and to stimulate the elaboration of high academic level master theses.
- 2010 Distinction, Manuel Pardo and Lavalle President for Academic Merit, The Board of Trustees of the National University of Engineering Award to the best students in each of the disciplines offered by the University..

Computer Skills

- o Data Analysis: R, Python and Stata, OpenBUGS and SPSS
- Database management: SQL, PostgreSQL, MongoDB, and MS Excel.
- Others: Latex, Matlab, Visual Basic, MS Office.

Languages

- Spanish: Native SpeakerFrench: Upper Intermediate
- English: Proficient in spoken and written english