

CONTACT

- ✉ rflores@wpi.edu
- 🌐 RicardoFloresH
- in ricardo-flores
- i rflores.cl
- 🏠 DAISY Lab

SKILLS

Machine Learning	5+ yrs
Deep Learning	4+ yrs
NLP	3+ yrs
Time Series classification/forecasting	4+ yrs
Transfer Learning	3+ yrs
Web Scraping	5+ yrs
Visualization	5+ yrs

RICARDO FLORES

Research Assistant - Data Science Department
Advisor: Elke Rundensteiner

EDUCATION

Ph. D. - Data Science Worcester Polytechnic Institute (WPI), MA, USA	2018 - 2023
M. S. - Economics University of Concepcion - Concepcion, Chile	2011 - 2013
B.S. - Business Engineer University of Concepcion - Concepcion, Chile	2006 - 2010

WORK EXPERIENCE

Data Analyst Central Bank of Chile, Santiago, Chile	2014 - 2018
Collecting, cleaning, modeling, and publishing data related to economic indicators of Chile. Research in the statistic and real estate market.	
Assistant Professor University of Concepcion, Concepcion, Chile	2012 - 2013
Teaching microeconomics (undergrad) and econometrics (graduate).	

PUBLICATIONS

AudiFace: Multimodal Deep Learning For Depression Screening Machine Learning for Healthcare, 2022	MLHC
Status: Accepted and Published	
Temporal Facial Features for Depression Screening ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp) Mental Health: Sensing and Intervention, 2022	ACM
Status: Accepted	
BERT Variants for Depression Screening with Typed and Transcribed Responses ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp) Computing for Well-being (WellComp), 2022	ACM
Status: Accepted	

PROGRAMMING

R	5+ yrs
Python	4+ yrs
Linux	3+ yrs
SQL	2+ yrs
Stata	5+ yrs

ACHIEVEMENTS

Ph.D. Scholarship, 2018 - 2022

Acceptance rate 9%

Ph.D. Scholarship to study in the United States, supported by Fulbright Foreign Student Program and the National Agency for Research and Development (ANID), Chile.

Award, 2015

Innovator Of The Year

Innovator of the year, nominated by the Statistics Department of Central Bank of Chile.

M. S. Scholarship, 2012 - 2013

Acceptance rate 18%

National masters scholarship supported by the National Agency for Research and Development (ANID), Chile.

Transfer Learning for Depression Screening from Follow-up Clinical Interview Questions Deep Learning Applications, vol 4, Springer, 2023

Springer

Status: Accepted and Published

Early Mental Health Uncovering with Short Scripted and Unscripted Voice Recordings Deep Learning Applications, vol 4, Springer, 2023

Springer

Status: Accepted and Published

Measuring the Uncertainty of Environmental Good Preferences with Bayesian Deep Learning Proceedings of the 2022 ACM Conference on Information Technology for Social Good, 2022

ACM

Status: Accepted and Published

DepreST-CAT: Retrospective Smartphone Call and Text Logs Collected During the COVID-19 Pandemic to Screen for Mental Illnesses ACM Proceedings on Interactive, Mobile, Wearable and Ubiquitous Technologies, vol 6 (2), 2022

ACM

Status: Accepted and Published

StudentSADD: Rapid Mobile Depression and Suicidal Ideation Screening of College Students during the Coronavirus Pandemic ACM Proceedings on Interactive, Mobile, Wearable and Ubiquitous Technologies, vol 6 (2), 2022

ACM

Status: Accepted and Published

Ensembles of BERT for Depression Classification 44th International Conference of IEEE Engineering in Medicine and Biology Society (EMBC), pp 4691-4694, 2022

IEEE

Status: Accepted and Published

Impact Assessment of Stereotype Threat on Mobile Depression Screening using Bayesian Estimation Healthcare Analytics, Elsevier, 2772-442, 2022

Elsevier

Status: Accepted and Published

Depression Screening Using Deep Learning on Follow-up Questions in Clinical Interviews 20th IEEE International Conference on Machine Learning and Applications (ICMLA), 2021

ICMLA

Status: Accepted and Published

PROJECTS

Multimodal Models for Depression Screening Tool: Transfer learning

2021

We leverage state-of-the-art transfer learning models for depression screening using as input the recorded audio, text transcript, and images of patient interview.

Missing Values in Multivariate Time Series
Tool: Deep Learning

2019

We apply deep learning models to impute missing values and classify multivariate time series, using some modify Recurrent Neural Network. The application of these techniques is in Healthcare.

An Alternative Housing Price Index for Chile
Tool: Web Scraping

2017

We use the Web Scraping technique to collect data from real estate website. Then, we compute a new index that is useful as a contrast index.

Urban Land Value Estimation for Chile
Tool: Machine Learning

2017

We developed a methodology to estimate the national value of a property separated by construction and land. This result will improve the Chilean household statistics.

WORKSHOPS & CONFERENCES

Mental Health: Sensing and Intervention
Atlanta, US

Sep 2022

ACM International Conference on Information Technology for Social Good
Limassol, Cyprus

Sep 2022

Machine Learning for Healthcare
MLHC

Aug 2022

20th International Conference on Machine Learning and Applications (ICMLA)
IEEE

Dec 2021

Recent Progress in Foundational Data Science, IMA Workshop
University of Minnesota, Minneapolis, USA

Aug 2019

60th World Statistics Congress
Rio de Janeiro, Brazil

Aug 2015

EXTRACURRICULAR

- Guitar
- Martial arts
- Fly Fishing