## CONTACT

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A DAISY Lab

# RICARDO FLORES

Data Science Ph.D. 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

Postdoc, Data Fusion and Machine Learning Sanofi (healthcare/pharmaceutical Co.), MA, USA 2023 - 2024

2022 - 2023

Evaluate and apply multimodal models using machine/deep learning techniques to multi-sensor tools for complex biological datasets

**Teaching Professor** 

Metropolitan University of Tech., Santiago, Chile

Teaching Machine Learning and Deep Learning for data analysis techniques course

**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 statistics and real estate market

**Assistant Professor** 

University of Concepcion, Concepcion, Chile

2012 - 2013

**BigData** 

**BigData** 

Teaching microeconomics (undergrad) and econometrics (graduate)

### **PUBLICATIONS**

DeepScreen: Boosting Depression Screening Performance with an Auxiliant Task

mance with an Auxiliary Task

IEEE International Conference on Big Data, 2023

Status: Accepted

Multi-Task Learning Using Facial Features for Mental Health Screening

IEEE International Conference on Big Data, 2023

Status: Accepted

## SKILLS

Deep Learning

Deep Learning	J. A12
Natural Language Pro- cessing	4+ yrs
Computer Vision	3+ yrs
Signal Processing	4+ yrs
Transfer Learning	5+ yrs
Time Series	5+ yrs
Visualization	5+ yrs

5+ vrs

## **PROGRAMMING**

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

## **ACHIEVEMENTS**

#### Research Award, 2023

#### Second place

Data Science, Cybersecurity, and Computer Science category for the Graduate Research Innovation Exchange (GRIE), 2023. At Worcester Polytechnic Institute (WPI), MA, USA

#### 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 WavFace: A Multimodal Transformer-based Model for Depression Screening

Mob. Wearable Ubiquitous Technol. (IMWUT), 2023

Status: Submitted

Wearable wellness, depression screening via Fitbit data collected during covid 19 pandemic

MIT IEEE Undergraduate Research Technology Conference, 2023

Status: Accepted

AudiFace: Multimodal Deep Learning For Depression Screening

Machine Learning for Healthcare, 2022

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

Status: Accepted and Published

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

Status: Accepted and Published

Transfer Learning for Depression Screening from Follow-up Clinical Interview Questions

Deep Learning Applications, vol 4, Springer, 2023

Status: Accepted and Published

Early Mental Health Uncovering with Short Scripted and Unscripted Voice Recordings

Deep Learning Applications, vol 4, Springer, 2023

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

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

Status: Accepted and Published

ACM

**IMWUT** 

**MIT-URTC** 

**MLHC** 

ACM

Springer

Springer

ACM

ACM

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

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

Status: Accepted and Published

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

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

Status: Accepted and Published

## **WORKSHOPS & CONFERENCES**

Mental Health: Sensing and Intervention Atlanta, US

**ACM International Conference on Information Tech**nology for Social Good

Limassol, Cyprus

**Machine Learning for Healthcare** 

**MLHC** 

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

**IEEE** 

Recent Progress in Foundational Data Science, IMA Workshop

University of Minnesota, Minneapolis, USA

**60th World Statistics Congress** 

Rio de Janeiro, Brazil

# Aug 2015

## **EXTRACURRICULAR**

- Guitar
- Martial arts
- Fly Fishing

**ACM** 

**IEEE** 

Elsevier

**ICMLA** 

Aug 2022

Sep 2022

**Sep 2022** 

Dec 2021

Aug 2019