ANDRÉS C. RODRÍGUEZ

Birth: 02.12.1990 Bogota, Colombia

Stefano-Franscini-Platz 5 HIL D 52.4⋄ Zurich, 8093

(+41) 76 595 7722 ⋄ andres.rodriguez@geod.baug.ethz.ch

https://ch.linkedin.com/in/andrescamilor, Google-Scholar

EDUCATION

ETH Zurich   *October 2017 - Present*
PhD Photogrammetry and Remote Sensing
Main focus in the intersection of Deep Learning / Machine Learning, Computer Vision and Remote
Sensing for open issues in Ecology and Agriculture

ETH Zurich   *August 2017*
Msc Statistics
Main focus in Machine Learning

Thesis: "Unsupervised Learning: Generative Models for Cosmology"

Pontificia Universidad Javeriana, Bogota - Colombia   *December 2012*
B.S. Industrial Engineering
Main focus in the intersection of Mathematical Modeling and Ergonomics

Thesis: "Optimizing the use of the muscles in industrial jobs by rotation schemes"

EXPERIENCE

ETH Zurich   October 2017 - Present
Research Assistant   *Zurich, Switzerland*

· EcoVision and Photogrammetry and Remote Sensing Group
· Satellite Image Understanding using Deep Learning
· Teaching Assistant Image Processing, Machine Learning and Multivariate Statistics
· Co-supervisor of Several Bsc. and Master thesis covering the intersection of Remote Sensing and
  Machine Learning
· Organizer of the first Machine Learning Workshop for Environmental and Geosciences (MLEG2019)
  www.mleg.ethz.ch

ETH Zurich   April 2016 - September 2017
Research Assistant   *Zurich, Switzerland*

· MTEC - Chair of Risk and Insurance Economics
· Data processing with STATA and R
· Statistical Analysis: Models for panel data using Logistic Regression, Hurdle models and and Box-Cox
  Regression.

Pontificia Universidad Javeriana   March 2014 - July 2016
Research Assistant   *Bogota, Colombia*

· Joint Research Project with University of Washington, WA and Northeastern University, MA
· Data processing with Labview, SAS and R.
· Statistical Analysis: Logistic Regression, Mixed Models and Box-Cox Regression on Epidemiological
  Data.

TECHNICAL STRENGTHS

Advanced Knowledge	Python, Pytorch, Tensorflow, R, SAS, STATA
Intermediate Knowledge	SQL, C++

LANGUAGE SKILLS

English	C2
German	C1
Spanish	Native Language

PUBLICATIONS

[1] RODRÍGUEZ, A. C., AND BARRERO, L. H. Job rotation: Effects on muscular activity variability. *Applied Ergonomics 60* (2017), 83 – 92.

[2] RODRÍGUEZ, A. C., D'ARONCO, S., SCHINDLER, K., AND WEGNER, J. D. Mapping oil palm density at country scale: an active learning approach. *under review* (2020).

[3] RODRÍGUEZ, A. C., D'ARONCO, S., SCHINDLER, K., AND WEGNER, J. D. Privileged pooling: Better sample efficiencythrough supervised attention. *under review* (2020).

[4] RODRÍGUEZ, A. C., KACPRZAK, T., LUCCHI, A., AMARA, A., SGIER, R., FLURI, J., HOFMANN, T., AND RÉFRÉGIER, A. Fast cosmic web simulations with generative adversarial networks. *Computational Astrophysics and Cosmology 5*, 1 (Nov 2018), 4.

[5] RODRÍGUEZ, A. C., AND WEGNER, J. D. Counting the uncountable: deep semantic density estimation from space. *German Conference of Patern Recognition 2018* (2018).