## Lucas Rodés-Guirao

https://lcsrg.me | hi@lcsrg.me | he/him

### **EXPERIENCE**

#### **OUR WORLD IN DATA**

Senior Data Analyst April 2021 - present COVID-19 datasets

#### **EDREAMS ODIGEO**

Data Scientist

June 2018 - April 2021 | Barcelona, Spain

Applying Machine Learning in Product and Content areas.

#### NATIONAL INSTITUTE OF INFORMATICS

Research Intern

November 2017 - May 2018 | Tokyo, Japan

Deep Learning for Digital Typhoon Project under supervision of Prof. Kitamoto (Master Thesis).

#### **TRACY**

Software Developer

April 2017- March 2018 | Stockholm, Sweden

Machine learning applied to a pet-health wearable.

#### KTH ROYAL INSTITUTE OF TECHNOLOGY

**Teaching Assistant** 

January 2017 - October 2017 | Stockholm, Sweden

Assisting Prof. Atsuto Maki in Machine Learning Course.

#### KARLSRUHE INSTITUTE OF TECHNOLOGY

Research Assistant

March 2015 - July 2015 | Karlsruhe, Germany

Cognitive Radio under supervision of Univ.-Prof. Dr. rer.nat. Friedrich

K. Jondral and Ankit Kaushik (Baschelor Thesis).

## **EDUCATION**

#### KTH ROYAL INSTITUTE OF TECHNOLOGY

M.Sc in Electrical Engineering

Sept 2015 - June 2018 | Stockholm, Sweden

Cum GPA: 3.64/4

#### POLYTECHNIC UNIVERSITY OF CATALONIA

M.Eng in Telecommunications

Sept 2015 - June 2018 | Barcelona, Spain

Cum GPA: 3.53/4

B.Eng in Telecommunications

Sept 2011 - Sept 2015 | Barcelona, Spain

Cum GPA: 3.3/4

#### **DEUTSCHE SCHULE BARCELONA**

Sept 2003 - June 2011 | Barcelona, Spain

Abitur: 2.5 (High School)

## **SOCIAL**

GitHub @lucasrodes LinkedIn @lucasrodes Twitter @lucasrodesg Medium @lucasrg

## COURSEWORK

# COMPUTER SCIENCE & ELECTRICAL ENGINEERING

Machine Learning, Deep Learning, Artificial Intelligence, Computer Vision, Information Retrieval, Unix Systems, Digital Signal Processing, Wireless Systems, Information Theory, Probability Theory.

#### **ONLINE COURSES**

Digital Signal Processing (Coursera), Python for Everybody (Coursera), Django for Everybody (Coursera), Deep Learning Specialization by DeepLearning.Al (Coursera), Convolutional Neural Networks for Visual Recognition (Stanford).

## **SKILLS**

#### **NATURAL LANGUAGES**

Native: Spanish, Catalan Fluent: English, German Elementary: Swedish

#### **PROGRAMMING LANGUAGES**

Advanced: Python, SQL

**Confident**: Bash, SQL, JavaScript/TypeScript, Matlab

Familiar: CSS, HTML, R, Rust, Java, C

#### **TOOLS & UTILITIES**

Git/Mercurial, ssh, docker, GitHub/Bitbucket, unit testing, A/B testing, GNU/Linux, CI/CD (Travis, Jenkins), Google Cloud Platform, numpy/scipy, pandas/dask, sklearn, tensorflow/keras, xgboost, plotly/bokeh, cookiecutter, GPU, React Native, Raspberry PI, JetBrains, VS Code, Jira/Confluence, Trello, Adobe Photoshop, Logic Pro, Blogging, DaVinci Resolve.

## **EXTRA**

Member Telecos.cat Regional Society

Guide Smart City Expo World Congress 2015

Organiser Youth Association enkbronats

(Cabrera de Mar, Sept 2013 - Sept 2019)

Volunteering
DJ/Producer
Teacher
Open Source
SJ Vietnam (Hanoi, August 2014)
Freelance, Al-Faru and Be Water
Maths/Physics for high school students
pandas (contributor), whatstk (author)

In my freetime I enjoy baking bread and playing the ukulele. Dancing at 120 bpm is also a great distraction.

## Lucas Rodés-Guirao

https://lcsrg.me | hi@lcsrg.me | he/him

## **PUBLICATIONS**

- [1] F. Baldassarre, D. González Morín, and L. Rodés-Guirao, Deep Koalarization: Image Colorization using CNNs and Inception-ResNet-v2, ArXiv:1712.03400, (2017).
- [2] L. Rodés, A. Kaushik, S. K. Sharma, S. Chatzinotas, and F. Jondral, Square-Law Selector and Square-Law Combiner for Cognitive Radio Systems: An Experimental Study, in IEEE 84th Vehicular Technology Conference: VTC2016-Fall, 2016.

## **PROJECTS**

#### **ODISI** LAEN Technologies

Jan 2020 - May 2020 | Barcelona, Spain

website

Development of mobile App using React Native and TypeScript for iOS and Android.

### WHATSTK Open Source

Dec 2016 - Present | Barcelona, Spain

website | github | pypi

Development, testing, versioning, maintainance of an open source python library to read and analyse WhatsApp chat. Distributed under the GPI-3.0 license.

#### **HOTEL BOOKING PREDICTIVE MODEL** eDreams **ODIGEO**

Feb 2019 - Jan 2020 | Barcelona, Spain

Implementation of Machine Learning model to predict the user propensity to book a hotel.

#### VIRTUAL INTERLINING eDreams ODIGEO

Sep 2018 - Jan 2019, Oct 2019 - Present | Barcelona, Spain virtual interlining info

Create new content combining flights/segments from different data sources (e.g. different carriers, providers etc.) using Machine Learning. Exploratory data analysis, training/hyper-parameter tuning, productionalisation, testing, versioning and maintainance of the model, analysis on the results from A/B tests, etc. Working with Data Engineer, Backend Engineers and Business.

#### **DEEP LEARNING FOR DIGITAL TYPHOON**

Academic (NII, KTH, UPC)

Nov 2017 - May 2018 | Tokyo, Japan

report | github | documentation

image dataset. Part of my Master Thesis.

## **DEEP KOALARIZATION** Academic (KTH Royal Insitute

of Technology)

Jun 2017 - Dec 2017 | Stockholm, Sweden

website | github | paper

Acknowledged by Keras creator François Chollet, we review recent approaches to colorize gray-scale images using deep learning methods and propose a novel colorization model.

#### **SENSOR MOTION DATA EXPLORATION Tracy**

**Trackers** 

Apr 2017 - Mar 2018 | Stockholm, Sweden

Development and implementation of an Al/Machine learning based algorithm for pet-health IT device in an early-stage Start-up. Data collection, data cleaning, Cloud architecture discussions. Start-up roadmap etc.

#### TRUMP TWITTER ANALYSIS/VISUALISATION

Academic (KTH Royal Insitute of Technology) Apr 2017 - Jun 2017 | Stockholm, Sweden

github | report

Visualization of President Trump Tweets using Kibana and ElasticSearch. This project was developed as part of the DD2476 Search Engines and Information Retrieval Systems course at KTH Royal Institute of Technology, spring 2017.

#### KERNEL PCA FOR DENOISING Academic (KTH

Royal Insitute of Technology)

Nov 2016 - Jan 2017 | Stockholm, Germany

report | github | original paper

We reproduced the experiments presented in the paper Kernel PCA and De-noising in Feature Spaces by Sebastian Mika, Bernhard Schölkopf, Alex Smola Klaus-Robert Müller, Matthias Scholz and Gunnar Rätsch as a project in DD2434 Machine Learning Advance Course during Winter 2016.

#### **BOOK AUTHOR CLASSIFICATION** Academic

(Polytechnic University of Catalonia)

May 2016 - Jun 2016 | Barcelona, Spain

report | github

Benchmarking of NLP classification models applied to spanish literature book fragments.

## DEPLOYMENT OF ENERGY DETECTOR FOR COGNITIVE RELAY WITH MULTIPLE

**ANTENNAS** Academic (Karlsruhe Institute of Technology)

Mar 2015 - Jul 2015 | Karlsruhe, Germany report

Bachelor thesis in Telecommunications Engineering as an exchange student at KIT.

Deployment of a signal detector based on Energy Detection in order to take advantage of spectrum holes in a Cognitive Relay scenario. Furthermore, the case with multiple antennas Deep Learning and Computer Vision applied to a typhoon satellite in reception (i.e. where the detection process occurs) are studied.