# Lampros Mouselimis

Athens, Greece

mlampros.github.io – github.com/mlampros – <u>mouselimislampros@gmail.com</u>



### Cover letter

Dear Sir / Madam,

I am competent in two programming languages (R, Python) and I take advantage of C++ ( in R through the  $\underline{\text{Rcpp}}$  and  $\underline{\text{RcppArmadillo}}$  packages and in python through Cython ) to improve the efficiency of internal functions.

I'm the author / maintainer of the following R language CRAN packages :

- **OpenImageR** : An Image processing Toolkit in R
- KernelKnn: Kernel k Nearest Neighbors in R
- **ClusterR** : Gaussian Mixture Models, K-Means, Mini-Batch-Kmeans, K-Medoids and Affinity Propagation Clustering
- textTinyR: Text Processing for Small or Big Data Files in R
- geojsonR: A GeoJson Processing Toolkit
- **fuzzywuzzyR**: Fuzzy string matching
- GeoMongo: Geospatial Queries Using PyMongo in R
- RGF: Regularized Greedy Forest in R
- **nmslibR**: Non Metric Space (Approximate) Library in R
- **elmNNRcpp** : Extreme Learning Machine
- **SuperpixelImageSegmentation**: Image Segmentation using Superpixels, Affinity Propagation and Kmeans Clustering

Furthermore, I've uploaded the following R packages to my Github account ( https://github.com/mlampros ),

- FeatureSelection: Feature Selection in R using glmnet-lasso, xgboost and ranger
- RandomSearchR: Find the optimal parameters of an algorithm using random search in R
- GloveR: Global Vectors for Word Representation
- **fastText**: Efficient Learning of Word Representations and Sentence Classification

#### Additionally,

- I am capable of using deep learning frameworks such as <u>Keras</u> (with Theano or Tensorflow backend) and <u>Pytorch</u>.
- I can also implement functions in CUDA programming and port the functions in Python or R.
- In summer 2018 (May June) I submitted a solution to <u>Copernicus Challenges</u> with the title "*Change detection based on Synthetic Aperture Radar (SAR) data*" (I developed code to download and process Sentinel-1 and Sentinel-2 satellite imagery and extract information based on state of the art unsupervised machine learning methods).
- I can setup and run R, Python scripts on Cloud (such as on Amazon Web Services).

Moreover, I've set up a blog ( <a href="http://mlampros.github.io/">http://mlampros.github.io/</a> ) where I write mainly about R, python and machine learning.

A syndrome (Irritable Bowel Syndrome), which by the way currently affects 1 in 10 people worldwide sometimes creates difficulties in my daily life. However, I am eager to learn new skills, especially in an evolving field, such as data science.

I'm looking forward to your response. Thank you.

### Education

1996 - 2001

Diplom of Business Administration, University Tuebingen, Germany

<u>Diplom Thesis</u>: "The effects of the introduction of Euro to the international price policy"

[ According to the German "Higher Education Framework Act" of 20.08.1998 the alternative study system of "Bachelor" and "Masters" Degree with duration 4 to 6 years is equivalent to the university "Diplom" of the traditional German Educational System ]

# Post Graduate Training [statement of completion]

#### Coursera

#### **Programming Language: Python**

- Learn to Program, The Fundamentals (University of Toronto)
- Learn to Program, Crafting Quality Code (University of Toronto)
- Coding the Matrix, Linear Algebra through Computer Science Applications (Brown University)
- An Introduction to Interactive Programming in Python (Rice University)
- Cluster Analysis in Data Mining (University of Illinois at Urbana-Champaign)
- Sequence Models (deeplearning.ai)

#### Programming Language: Python, SQL, R

- Web Intelligence and Big Data (Indian Institute of Technology Delhi)
- Data-driven Astronomy (University of Sydney)
- Introduction to Data Science (University of Washington)

#### **Programming Language: R**

- R Programming (Johns Hopkins University)
- Getting and Cleaning Data (Johns Hopkins University)
- The Data Scientist's Toolbox (Johns Hopkins University)
- Reproducible Research (Johns Hopkins University)
- Exploratory Data Analysis (Johns Hopkins University)
- Developing Data Products (Johns Hopkins University)
- Practical Machine Learning (Johns Hopkins University)
- Regression Models (Johns Hopkins University)
- Statistical Inference (Johns Hopkins University)
- Computing for Data Analysis (Johns Hopkins University)
- Bayesian Statistics: From Concept to Data Analysis (University of California, Santa Cruz)

#### Programming Language: Matlab, R

• Core Concepts in Data Analysis (Higher School of Economics)

#### **Programming Language: Octave**

• Machine Learning (Stanford University)

#### <u>Edx</u> Programming Language : R

• The Analytics Edge (MITx – 15.071x)

#### Programming Language: Python, Spark

• Introduction to Big Data with Apache Spark (BerkeleyX – CS100.1x)

Scalable Machine Learning (BerkeleyX - CS190.1x)

weka.waikato.

ac.nz

**Programming Language : Weka** 

- Data mining with Weka (University of Waikato)
- More data mining with Weka (University of Waikato)

online.stanford

<u>.edu</u>

**Programming Language : R** 

• Introduction to statistical learning (Stanford University)

open.hpi.de

**Programming Language : SQL** 

• Datenmanagement mit SQL (Hasso-Plattner-Institut)

### Work Experience

5/2004 -9/2004

Employment in the logistics department of the Olympic games Athens 2004

11/2004-2/2016

Field worker (external employee) in a market research company

# Languages

Greek

Native speaker

**English** 

- Certificate of Competency in English (The university of Michigan)
- State Certificate of Foreign Language Proficiency (C1 level in Greece)
- TOEFL ibt (Test of English as foreign language 2011, score : 91)
- TOEFL ibt (Test of English as foreign language 2018, score : 91)

German

I acquired the knowledge during my university studies

# **Programming Languages**

Excellent R **Proficient Python Proficient** C++ **Familiar** Matlab **SQL** Familiar **Familiar MongoDB Familiar Octave CUDA** Familiar

### Personal Skills

Blog <a href="http://mlampros.github.io/">http://mlampros.github.io/</a>
Github <a href="https://github.com/mlampros">https://github.com/mlampros</a>

Operating Systems

I am capable of working on a Linux, Macintosh or Windows operating system

Programming competitions

From time to time I participate in programming competitions (such as in <u>Kaggle</u>) in order to improve my coding skills and to learn about new machine learning

methods.

### Personal Data

**Date of Birth** 06<sup>th</sup> September 1976

SexMalePlace of BirthGreeceMartial StatusSingle

**Health** Irritable Bowel Syndrome (IBS). IBS affects about 1 out of 10 people according to

the International Foundation for functional gastrointestinal disorders (<u>IFFGD</u>)

**Driving License** Car, Motorcycle

Free time Activities • running, swimming, cycling, tennis playing, watching movies

• from 2007 to 2010 I was an amateur triathlete

• since 2006 I participate occasionally in trail running competitions