

João Matias

Rua Jorge Barradas, 47, 3 E, 1500-369 Lisboa, Portugal

✉ joaopmatias@gmail.com • ☎ (+351) 93 250 6061 • 🌐 joaopmatias.github.io • in www.linkedin.com/in/joaopcmatias

SUMMARY

Data Scientist with a background in Mathematics. Broad experience with time-series analysis and maintaining forecast algorithms in production. Proficient in Python, R and Java. Passionate software developer, constantly pursuing higher standards and proactively testing innovative ideas. Dedicated team player always encouraging the share of knowledge. Accustomed to dealing with technical concepts and with great attention to detail. Ability to tackle challenges implementing creative and reliable solutions.

Interests: Data Science, Data Engineering, Operations Research and Open Source Software.

EXPERIENCE

- **Data Scientist**, Talkdesk Apr 2019 –
Developed time-series algorithms to forecast call centers activity in a medium term horizon.
Implemented stable solutions in R and Python to use directly in Java microservices.
Write procedures to evaluate the quality of forecast algorithms.
 - **Graduate Teaching Assistant**, The Pennsylvania State University Aug 2012 – Aug 2018
Taught courses at an undergraduate level ranging from college algebra to multivariable calculus, while conducting my own research. Also managed the associated online platform by uploading extra materials and grades.
-

EDUCATION

- The Pennsylvania State University**, State College, PA, USA
▪ Ph.D. in Mathematics, Aug 2012 – Dec 2018
Specialization: Combinatorics and Number Theory
Dissertation: *Prime geodesic theorem for complexes of $\mathrm{PGL}_3(F)$ and $\mathrm{PGSp}_4(F)$.*
 - Instituto Superior Técnico (IST)**, University of Lisbon (UL), Lisbon, Portugal
▪ Master in Applied Mathematics Sep 2010 – Jul 2012
▪ BSc in Applied Mathematics and Computation Sep 2007 – Jul 2010
-

ADDITIONAL EXPERIENCE

- **Data Science Academy**, Coimbra Jan 2020 – Feb 2020
Organized sessions and materials on Machine Learning and Neural Networks based algorithms used in time series analysis.
 - **AI Sunsets**, Coimbra Sep 2019
Gave a workshop on convolutional neural networks and image classification using Tensorflow to university students.
 - **Science Outreach**
Assisted in science activities for high school students as a volunteer in *Escola Aleph* (2008-2009) and *HAC* (2018-). Tasks included interacting individually with the students, and organization of sessions with math problems.
 - **Competitive Programming**
Participation in *Google Code Jam*, *Codeforces*, *Hackerrank*, and *Leetcode*.
 - **Multiple Research Fellowships** (Undergraduate Student) 2007 – 2011
Studied various extra-curricular subjects including: knot theory, number theory, plane geometry and algebraic geometry. These projects led to two publications in peer-reviewed journals.
 - **Math Olympiads** 2002 – 2009
Represented Portugal in international competitions, and won medals multiple times.
-

PROGRAMMING

- **Advanced:** Python, R, Java, C++, Git, \LaTeX , Sage
- **Basic:** Scala, Docker, HTML, MatLab, Emacs, Vim

LANGUAGES

Portuguese: native language

English: fluent

**PROFESSIONAL
TRAINING****Coursera**

- *Machine Learning*, offered by Stanford University
- *Sequence Models*, offered by DeepLearning.AI
- *Bayesian Statistics: From Concept to Data Analysis*, offered by UC Santa Cruz
- *Functional Programming Principles in Scala*, offered by EPFL

Datacamp

- Airflow and PySpark

Udacity

- *Deep Learning*, offered by Google

Penn State World Campus

- *Graduate Student Online Teaching Certificate*

XSEDE Workshops

Participation in seminars given by the *Pittsburgh Supercomputing Center* on parallel computing and supercomputing. The technologies shown include Hadoop, Spark, OpenACC, and OpenMP.
