João Moreira

✉ not-real@gmail.com | 🏠 jagmoreira.com | ⓖ jagmoreira | in joao-moreira

skills

modeling

Machine learning
Time-series analysis
Maximum likelihood
Sampling methods
MCMC
Hypothesis testing
Map-reduce

development

Python | 5+ yrs
bash | 5+ yrs
git | 4+ yrs
C++ | 2+ yrs
R | 6 mos

tools

Django
numpy
scipy
pandas
scikit-learn
matplotlib
requests
Beautiful Soup

databases

MySQL | 5+ yrs
MongoDB | 4+ yrs

web design

HTML5
CSS3
Less & Sass
Javascript
D3

education

2011−Present	**Ph.D.** Chemical Engn.	*Northwestern University, Evanston IL*

Expected graduation: Aug 2017

2009−2011	**M.Sc.** Physics	*Universidade de Lisboa, Lisbon, Portugal*

Specialization: Statistical and Non-Linear Physics
Thesis: *Evolutionary Dynamics of Cooperation in Multiplayer Games*

2006−2009	**B.Sc.** Physics	*Universidade de Lisboa, Lisbon, Portugal*

experience

2011−Present — Northwestern University — *Evanston, IL*

Data Scientist

- Used maximum likelihood estimation to parameterize the distribution of the impact of scientific publications (~1TB dataset)
- Created a Django web application to showcase my research: http://forecite.us
- Performed time-series analysis on IMDb metadata of +15k movies

Instructor

- Developed course materials and was an instructor for 'Introduction to Python Programming and Data Science Bootcamp'
- TA for Process Control, Quantum Mechanics, Mass Transfer
- Mentored 2 younger graduate students and 2 high-school interns

2016 | 6 mos — GadflyZone — *Vernon Hills, IL*

Data Science Intern

- Constructed MySQL database of patents on Amazon Database Relational Services built from publicly available patent information
- Used natural language processing and citation analysis to design a multidimensional scoring engine to predict a company's innovativeness

2014 | 4 mos — Narrative Science — *Chicago, IL*

Software Engineer

- Developed Python tools to automatically gather and perform statistical analysis of stories written by Quill, Narrative Science's patented artificial intelligence platform
- Used Quill to collect the most relevant metrics from the stories' analysis and to generate an email report that produced insight about the inner workings of the platform

dissemination

Oral presentations	**Presented research at 9 international conferences**
Publications	**Published 6 research papers**
Peer review	**Reviewed for PLoS One, PLoS Biology, and New Journal of Physics**
Blog posts	**jagmoreira.com/archives**
Languages	**Portuguese (native)	English (fluent)**