Juan Manuel Berros

Data analysis & visualization
Web development

✉ juanma.berros@gmail.com
📍 Buenos Aires, Argentina

Brief description

I love to make data visualizations, iteratively search for the best way to convey a narrative until the figures say exactly what you mean. I'm used to translating the intuitions and insights of non-technical collaborators to code and plots.

I enjoy programming in Python and Ruby, either writing quick scripts for small tasks, orchestrating and monitoring pipelines of data processing, or architecturing monolithic applications with a complex ontology of classes and maintaining their health over time and through changes of goals.

I lean towards scientific and quantitative analyses, but I'm open to any kind of data oriented field if the challenge is interesting.

Work experience

- **Data analysis & visualization / Full stack web development**, Biocódices S.A (2016-2022)
  Tools: pandas, numpy, matplotlib, seaborn, scipy, Jupyter, luigi (pipelines), pytest, lots of bioinfo software (plink, gatk, bwa, bcftools, etc), lots of scripting in Python and Bash, Ruby on Rails + MySQL + jQuery

- **Workshop teacher in a post-graduate Population Genomics course**, UBA (2017-2019)

- **Full stack web development**, Pemasys S.R.L. (2014–2015)
  Tools: Rails programming for the back-end, jQuery for the front-end. Less for the CSS.

- **Web development / Sysadmin**, Sumavisos S.A. (2012–2014)
  Tools: Padrino (web dev framework in Ruby), MySQL/MariaDB, Redis, Nginx.

- **Search Engine Marketing (SEM)**, Sumavisos S.A. (2011-2012)
  Tools: Adwords & Adsense, Excel. Arbitrage of online traffic buying and selling.

Skills

- **Data analysis and visualization**: Jupyter notebooks, pandas, numpy, matplotlib, seaborn, scipy, statsmodels (Python). Some Js, some d3. In R, the tidyverse packages.
- **Statistics and modeling**: linear and logistic regression, generalized linear models, maximum likelihood estimation, dimensionality reduction (i.e. PCA, t-SNE, UMAP). Some network analysis (e.g. centrality measures) and graph visualization in Python. Cross-validation. I would love to learn ML methods.
- **Web development**: Ruby on Rails, unit testing and integration testing, continuous integration, Javascript (mostly jQuery), MySQL/MariaDB, PostgreSQL, Redis
- **Linux**: I always worked with Ubuntu Linux servers, so I lean heavily on command line utilities: git, tmux, awk, GNU parallel, vim. Some Ansible.

Education

- **PhD in Bioinformatics**, UBA, Argentina (2018-2022)
- **Specialization in Mathematical Statistics**, Insitituto del Cálculo, FCyEN, UBA, Argentina (2017-2019)
- **BSc in Biology**, Universidad CAECE, Argentina (2011-2016)