Bayesian causal data science

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Nationality	Swiss - Argentine
Languages	English C1 | French C1 | Spanish C2
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Bayesian inference. Computer science. Social anthropology.

- Promoter of the Latin American Bayesian community (bayesdelsur.com.ar)
- Causal reasoning based on the strict application of probability
- Developer and maintainer of open software in Python, Julia and R
- Solid experience in machine learning software development
- Outstanding methodological background in social sciences
- Fluent teamwork within interdisciplinary groups
- Scientific reports accessible to diverse audiences

Work experience

2022 – *Bayesian causal data science* – Laboratorios de Métodos Bayesianos
Specification and evaluation of alternative causal models in finance, health, sports and forensics.

2016 – *Graduate teaching assistance in Computer Science* – Buenos Aires University
Teaching activities in various courses at the Computer Science degree.
Master's thesis director in Computer Science and Seminar on Bayesian Inference.

2016 – 2022 *Doctoral Fellowship in Computer Science* – Instituto de Ciencias de la Computación
Artificial Intelligence Lab and High Performance Computing Lab.
Bayesian analysis of learning in video game communities (defense 2023)

2015 – 2016 *Coordinator* – National Audiovisual Audience Measurement System
Coordinator of the areas of social sciences and computer technical support.
Administration of the database and the automatic survey system.

2012 – 2013 *Social work* – Ministerio de Desarrollo Social, Argentina
Impact evaluation of public policies and counseling for the "Argentina Trabaja" program.

2008 – 2016 *Data Scientist* – Grupo Antropocaos
Formal methods in social sciences. Simulation and predictive models. Online bets.

Association *Co-founder* – Bayes Plurinacional
Organizer of the Bayesian Plurinational Community (bayesdelsur.com.ar).

Software tools Python (PyMC3, Scipy, Sklearn, Pandas, Numpy, TensorFlow, Virtualenv, ...), Julia (Turing, ...), R (Stan, ...), C# (Infer.NET), C++ (MPI), Haskell, Bash (screen, ssh, vi, rsync, awk ...), SQL, NoSQL, Git, Docker, Latex (Tikz), Html, ...

Education Buenos Aires University

2016 – 2022 PhD in **Computer Science.** (Defense 2023)

2012 – 2015 Licentiate in Computer Science. (Suspended after promotion to PhD)

2005 – 2009 Licentiate (BSc + MSc) in **Anthropological Sciences**.

Teaching Buenos Aires University

2020 – *Bayesian Inference* (with `C#`, `Julia`, `Python` and `R`). Faculty of Exact and Natural Sciences.

2019 – *One-on-one mentoring*. Director of master's thesis in the Department of Computer Science.

2019 – 2019 *Algorithms and data structures I* (with `C++`). Department of Computer Science.

2018 – 2019 *Introduction to Computer Science* (with `Python`). Department of Computer Science.

2018 – 2018 *Computational Social Science* (with `R`). Departments of Anthropology and Computer Science.

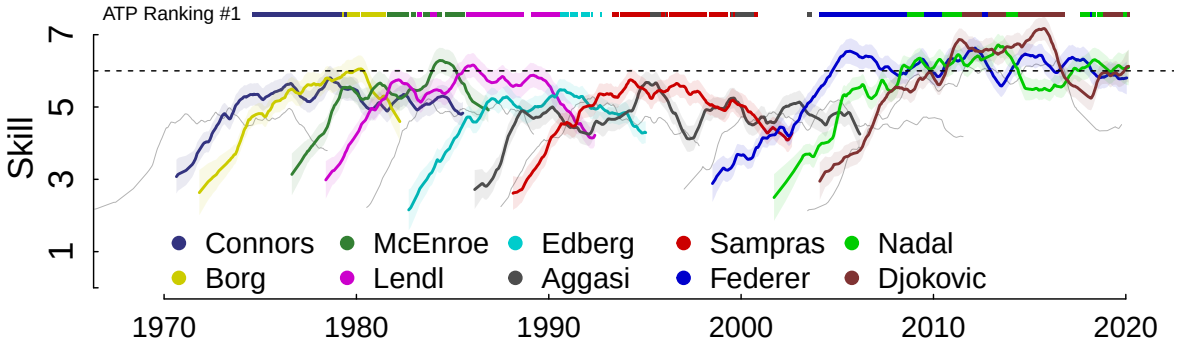
2016 – 2017 *Functional programming* (with `Haskell`). Department of Computer Science.

2010 – 2010 *Artificial Societies and Ethnography* (with `Netlogo`). Department of Anthropological Sciences.

Scientific research

Software

The state-of-the-art skill estimator: `github.com/glandfried/TrueSkillThroughTime`
Developer. Efficiently inference through distributed message-passing algorithms and analytical approximation methods, even in causal networks with millions of nodes and irregular structures.



Articles

○ Landfried, G., Cairo G., Mocskos E. *Exploring the effect of network structure on individual learning: a longitudinal study of an online Go game community*. Preprint Github 2022. Download.

○ Landfried, G; *Properties of the epistemic-evolutionary cost function. Lessons from the intelligence of life*. Preprint Github 2023.

○ Landfried G., Mocskos E. *TrueSkill Through Time: reliable initial skill estimates and historical comparability in Julia, Python and R*. In press at Journal of Statistical Software. 2021. Download.

○ Landfried, G; Fernandez Slezak, D; Mocskos, E: *Faithfulness-boost effect: Loyal teammate selection correlates with skill acquisition improvement in online games.* PLoS one. 2019.

Events

2022. Día de la investigación en Ciencias de la Computación. **Poster**

2019. 3rd ESLR. Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany. Poster.

2018. Machine Learning Summer School, MLSS. Torcuato Di Tella University, Argentina. Poster.