Lucas Einig

Signal processing engineer PhD in astrophysics ☑ lucas.einig99[at]gmail.com
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Experience

- 2024 today **Digital signal processing engineer**, *Netatmo*, Lyon, France Development of embedded algorithms for smart home devices.
- 2021 2024 **PhD in astrophysics**, *IRAM, GIPSA-Lab*, Grenoble, France Development of learning algorithms for statistical analysis of the interstellar medium using the Orion B giant molecular cloud as a template.
- 2023 2024 **Part-time teacher**, *Grenoble INP ENSE*³, Grenoble, France Introduction to machine learning, digital signal processing course, project "making a keyboard from a board", sensors and information processing practical sessions.
 - 2018 Final year project (6 months), *GIPSA-Lab*, Grenoble, France Application of machine learning methods to astrophysical hyperspectral data. Automatic denoising and information extraction from spectral lines of varying signal-to-noise ratios.
 - 2020 Internship at CRITIAS laboratory (3 months), *ETS*, Montréal, Canada Development of a cross-platform mobile app for the detection and prevention of hearing loss among music students.

Education

- 2019 2021 Master Signal and ImaGe processing Methods and Applications, Grenoble Alpes University, Grenoble, France Research-oriented training. Scientific writing, Bayesian inference, optimization non convexe, inverse problems, and modeling of physical phenomena.
- 2018 2021 Engineering degree in Signal Processing and Data Science (Master level), *Grenoble INP - PHELMA*, Grenoble, France Modeling of the generation and acquisition chain of physical processes, machine learning, information processing. "Energy, Environment & Health" elective track.
- 2016 2018 Preparatory classes in math-physics, Lycée La Martinière Monplaisir, Lyon, France

Skills

Programming Python, C, C++, Java, MATLAB, Bash, Dart, Flutter (mobile development)

Deep learning PyTorch

Others Git, SQL, PostgreSQL

Soft Interdisciplinarity, teamwork, scientific communication

Languages Français (natif), anglais (courant)

Loisirs

Basketball • Cooking • Hinking • Mobile app programming