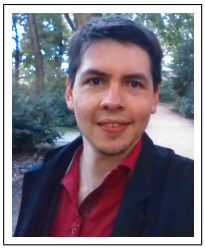
Diego Herbin Stalder Díaz



PHD in Applied Computing,

Languages: Spanish, Guarani, Portuguese, English and French
Engineering Faculty Researcher, Married, Barrio San Isidro Ybera, San Lorenzo, Paraguay

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Education

2013-2017 **Phd in Applied Computing**, *National Institute for Space Research (INPE), Brazil*, Bayesian Surface Photometry Analysis, Develop of a new tool called PyPiGALPHAT (Python Pipelining GALPHAT) to access and analyze efficiently, samples of galaxies images (with thousand objects) in a CPU Cluster.
INPE, in a colaboration with UMass, Brazil-USA

2016 **Sandwich Research Scholarship**, *Institut Astrophysique de Paris, France*, Modeling Environmental effects on galaxies probed with MAGGIE with Fortran90 and Python, Improving and applying MAGGIE to large datasets. MAGGIE is a prior- and halo-based, probabilistic, abundance matching (AM) grouping algorithm for doubly complete subsamples (in distance and luminosity) of flux-limited samples.
IAP, France

2011-2013 **Master in Applied Computing**, *National Institute for Space Research (INPE), Brazil*.

2004–2010 **Bachelor Degree**, *Electronic Engineering -National University of Asunción, Paraguay*.

Recent Projects

2021 **Improvement and expansion of the laboratory for monitoring the geomagnetic anomaly and space weather**, *Engineering Faculty-FIUNA- National University of Asunción*, Paraguay, Research Grant for Small Projects.

2020 **Implementation Validation Laboratory for Testing Medical Devices National** , *Engineering Faculty-FIUNA- National University of Asunción*, Paraguay, CONACYT Gran PINV20-352.
Youtube talk

Recent Work Experience

2019–Recent **Full Time Researcher**, *Engineering Faculty-FIUNA- National University of Asunción*, Paraguay, Research Interests: Space Weather, Earth Magnetic Field, Ionospheric,Instrumentation, Embedded System, Data Acquisition Research, Scientific Computing, Data Science.
http://www.ing.una.py/

2018–2019 **Research Coordinator** , *Paraguay Space Agency*, Paraguay, Research Interests:Basic Space Engineering.
http://www.aep.gov.py/

2017–2019 **Part Time Researcher, thesis advisor and lecturer** , *NIDTEC-FPUNA- National University of Asunción*, Paraguay, Research Interests:Scientific Computing, Data Science, Galaxy Morphology, Face Recognition with Deep Learning.
http://www.cc.pol.una.py/

2017–Present **Teaching C Programing and Physics**, *Engineering School-National University of Asunción(FIUNA)*, Paraguay.
http://www.ing.una.py/

2013–2018 **Bayesian Surface Photometry Analysis**, *Develop of a new tool called PyPiGALPHAT (Python Pipelining GALPHAT) to access and analyze efficiently, samples of galaxies images (with thousand objects) in a CPU Cluster*, INPE, in a colaboration with UMass, Brazil-USA.

2016 **Modeling Environmental effects on galaxies probed with MAGGIE with Fortran90 and Python**, *Improving and applying MAGGIE to large datasets. MAGGIE is a prior- and halo-based, probabilistic, abundance matching (AM) grouping algorithm for doubly complete subsamples (in distance and luminosity) of flux-limited samples*, IAP, France.

Technical skills

Physics , *Space Weather, Earth Magnetic Field, Ionospheric Research*.

Electronics , *Instrumentation, Embedded System, Data Acquisition*.

Machine Learning , *classification, regression, clustering, data aumentation, neural networks, convolutional neural networks* .

Statistical Methods , *time series, regression models, hypothesis testing and confidence intervals, principal component analysis, feature selection and Bayesian Inference*.

Software and Programming Languages , *C, C++, Python(scikit-learn, numpy, scipy, pandas, tensorFlow, Keras), Weka, R, Jupyter, Fortran90, CUDA and Java*.

Linux, *Shells, Scripting, and Data Management, High Performance Computing* .

Databases , *SQL, SQLite, Hdf5,* , Postgres.