GABRIEL
RUDLOFF BARISON

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ABOUT ME

Bachelor's and Master's degrees in Electronic Engineering. Master's focused on machine learning and advanced signal processing, with research in applying deep learning to fiber optic sensors. Solid understanding of deep learning, classical ML, and computer vision techniques. Hands on knowledge of MLOps best practices for inference pipelines and continuous training. Curiosity and thirst for knowledge are my main drive. Analytical mindset, attention to detail, and obsession with solving complex problems.

EXPERIENCE

GOOGLE CLOUD PLATFORM TECHNICAL SOLUTIONS REPRESENTATIVE - BIG DATA & AI
Oct. 2023 - Present

Webhelp | *Barcelona, Spain*

Work in internal use cases of GCP AI&ML services. Notably, deployed batch inference and scheduled training pipelines in Vertex Pipelines (Kubeflow) for automatically detecting cases that need special attention in order to act proactively and improve user experience. Provide hands-on assistance with GCP services: Vertex AI (Pipelines, Models, Custom training, AutoML, Gemini, Workbench), Dialogflow, BigQuery, Composer (Managed Airflow), Pub/Sub, Dataproc (Managed Spark), Dataflow (Managed Beam) and others.

SOFTWARE DEVELOPER INTERSHIP
Jan. 2020 - Apr. 2020

Inria | *Lille, France*

Worked on the development of metric-learn, a Python package that forms part of scikit-learn contributions package. The metric-learn package implements classic metric learning algorithms, that implicitly obtains a space transformation where the Euclidean distance is proportional to the semantic relation between pairs. My main contribution was the implementation of SCML.

DEVELOPMENT ENGINEER INTERNSHIP
Jan. 2019 - Apr. 2019

Kauel | *Santiago, Chile*

During my first internship, I gained practical experience in IoT development and AI research, contributing to key projects and enhancing my technical skills. I worked on designing and developing systems, interfacing with clients, and delivering proof-of-concept demos.

EDUCATION

B.S. IN ELECTRONIC ENGINEERING
2014-2020

Universidad Técnica Federico Santa María | *Valparaiso, Chile*

(Mention in computers, submention in telecomunications)

M.S. IN ELECTRONIC ENGINEERING **2020-2023**

Universidad Técnica Federico Santa María | *Valparaiso, Chile*

(Specialty in Telecommunications and Signal Processing)

Application of artificial intelligence in the context of fiber optic sensors., Thesis topic: "Peak detection of spectrally-overlapped fibre Bragg gratings using an unsupervised convolutional neural network autoencoder"

PUBLICATIONS

Articles

Gabriel Rudloff and Marcelo A. Soto (2023). "Peak detection of spectrally-overlapped fibre Bragg gratings using an autoencoder convolutional neural network". In: *European Workshop on Optical Fibre Sensors (EWOFS 2023)*. DOI: 10.1117/12.2679924.

Gabriel Rudloff and Marcelo A. Soto (2024). "Multipeak Wavelength Detection of Spectrally Overlapped Fiber Bragg Grating Sensors Through a CNN-Based Autoencoder". In: *IEEE Sensors Journal* 24.13, pp. 20674–20687. DOI: 10.1109/JSEN.2024.3400819.

ACHIEVEMENTS

Awards

- Academic Merit (2014-2017)
- 2nd place in FEUTFSM Environmental Ideas 2015

SKILLS

Programming languages

Python, SQL, BASH, C/C++, Matlab, Assembly, Java, Verilog, LaTeX, HTML

Frameworks, Libraries & Technologies

Kubeflow, Airflow, Git, Numpy, Pytorch, Tensorflow, Pandas, Sklearn, Xgboost, Matplotlib, Seaborn, PySpark, Pytest, OpenCV, Altium Designer, Vrep

Languages

- Spanish (Native)
- English (Full professional proficiency)

Hobbies

- Guitar & piano
- Bouldering - Biking - Surfing

CONTACT INFO

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