Florian J. B. Leitner

Data Scientist & Engineering Manager

C/ Juan Duque 26, 6C E-28005 Madrid

(2) +34-XXX-XXX-XXX

datacatalytics.com

\$ <u>fnl.es</u>

⊠ <u>leitner@datacatalytics.com</u>

- ⊠ <u>me@fnl.es</u>
- <u>linkedin.com/in/florianleitner</u>
- <u>github.com/fnl</u>
- <u>stackexchange.com/users/fnl</u>
- <u>scholar.google.com/citations?</u> <u>user=EkXLlysAAAAJ</u>

Profile

Scientific coach and leader specialized in machine learning + data and process analytics.

→ Coaching teams via the Toyota Kata to facilitate a mutual learning growth mindset

 \rightarrow Teaching the principles of scientific management while leading through an agile strategy

 \rightarrow Machine learning and data analytics specialist in biotech and finance (20+ years exp.)

Main career achievements: CTO of a financial news startup that successfully exited, Head of Machine Learning of an international financial data analytics entity, received a PhD in molecular biology (with distinction), published a first author paper in Nature Biotechnology, and founded a data science consultancy.

Recent Career

Head Of Machine Learning, ION Analytics, Madrid, ES & London, UK – 2021.05-Present

• Concurrently managing and coaching up to six different teams on disparate projects to develop a mutual learning mindset and apply the scientific method to their work.

- Developed the blue-print that the company uses to map its value streams and processes.
- Defining and promoting the company's data engineering, analysis, and governance doctrine.
- Tracking and orchestrating the company's LLM-related AI efforts.

• Coaching the product organization on ubiquitously applying augmented intelligence to automation, information extraction & retrieval, and recommendation.

▶ Teaching teams how to build supervised and semi-supervised human-in-the-loop systems to automate in-house workflows, increase structured data volumes, and reduce operational costs.

• Orchestrated early adaptation of LLMs to ensure long-term strategic positioning, making ION Analytics part of the exclusive set of multinationals with LLMs in production in 2023.

• Designed reusable natural language query interfaces to improve the UX and quality of content recommendations on the company's next-gen product line before LLMs were widely available.

Engineering Manager, ION Analytics, Remote (New York, USA & London, UK) - 2019.09-2021.04

▶ Led the development of a search interface for investor personas by extending the capabilities of Elasticsearch and improving the UX by allowing natural language-based data retrieval.

▶ Enhanced an in-house real-time content recommendation system by integrating Elasticsearch to enable the delivery of query-related context snippets ("highlights") and reduced the engine's overall memory footprint and cluster size, saving over \$100k YOY in operational costs.

 Coached a team of analysts and engineers to scale up the reference data system by two orders of magnitude more entities.

• Coordinated a TechOps team that expanded our continuous integration capabilities and automated tedious tasks, improving developer experience and reducing maintenance overhead.

Chief Technology Officer, Selerity Inc., Remote (New York, USA) - 2018.05-2019.08

Led a globally distributed team through a successful acquisition.

▶ Continually improved the quality of a proprietary recommendation system for public and private content with a team of data scientists by evolving the in-house NLP libraries that percolate financial events and information to multiple tier-1 banks.

• Overseeing the development of a credit trader chat analytics engine to predict trade partners, detect missed opportunities, and provide trade analytics that was sold to some of the biggest intra- and inter-bank Sales & Trading Platforms.

Faculty Member, IE University, Madrid, Spain – 2018.02-Present

• Teach core data science and machine learning concepts to MBA students while improving the class year-over-year using the students' evaluation feedback.

Senior Full-stack Data Scientist, Selerity Inc., Remote (New York, USA) - 2015.09-2018.04

• Evolved the in-house open information extraction and text classification systems for financial instruments, legal entities, and business concepts/topics by increasing systems performance against continuously annotated data generated from the QA process.

• Designed unsupervised text clustering algorithms for news and proprietary financial documents to detect correlations and trends by iteratively improving analyst reviews of cluster coherence.

• Domain-driven design of entities and aggregates needed for a trader chat analytics engine by collaborating with credit desk experts to establish all requirements and architect the data structures to encode the trader workflow.

• Tuning and maintaining Selerity's in-house message streaming platform (similar to NATS or Akka) by reducing end-to-end latency and resource use (CPU load & memory usage).

Full-stack Data Science Consultant, Data Catalytics, Madrid, Spain – 2015.09-2018.02

• Worked remotely as a part-time international consultant on various NLP-related projects, such as extracting structured data from CVs or patents via short, iterative deliverables defined at contract onset.

Instructor, Adv. Statistics and Data Mining Summer School, Madrid, Spain – 2014.02-2019.08

• Taught the NLP class component of a prize-winning summer school (5x3h lectures) to provide an in-person experience that is unavailable in online courses while improving class quality through participant feedback.

Juan de la Cierva fellow, Univ. Politechnica, Madrid, Spain - 2014.02-2015.08

• Researched probabilistic graphical models and developed text-mining systems in neurobiology to facilitate knowledge acquisition for neurobiology researchers and publish novel research in the field.

- Published a research article while teaching and mentoring PhD and master students.
- Invited speaker at research conferences and events.

	 Post-doctoral Fellow, Span. Nat. Cancer Research Centre, Madrid, Spain – 2012-2014 Developed a tool to extract transcription factor-gene interactions with the experimental evidence for the interaction from scientific publications and delivered on the objective of providing systems biologists with an autogenerated mammalian transcriptome. Published various research articles and presented at conferences globally.
Education	PhD, Autonomous University of Madrid, 2012 Molecular Biology, Bioinformatics, BioNLP
Business Skills	 Toyota Kata coaching and facilitative leadership from a mutual learning mindset Implementing business strategy by maximizing alignment <i>and</i> decision making autonomy Building flow engineering teams that embrace agile principles Teaching and implementing Lean habits for business processes Evolving a generative company culture with a growth mindset Company policy design and implemention; quality assurance in business processes Public speaking and writing, remote-first working
Technical Skills	 Machine learning frameworks and libraries (TF, Torch, SciKit-Learn, Spacy, NumPy, etc.) Data science and statistics libraries (Pandas, Seaborn, SciPy, Plotly, statsmodels, matplotlib) Machine learning operations (MLOps) tooling (dvc/cml, eli5, Kibana, MLflow, SageMaker) DevOps & observability tooling (Ansible, Docker, Helm, Graphite, Grafana, Icinga, Jenkins) Pub/sub messaging & stream processing systems (in-house, Spark, Avro, Akka, Kafka, NATS) Search engines (in-house, Lucene/Solr/ElasticSearch, Sphinx, Vespa, Xaipan) SQL & NoSQL data-stores (Cassandra, Databricks, MongoDB, MySQL, Postgres) Web/API development (GraphQL, nginx, Node, Postman, Swagger/OpenAPI, Twisted, vert.x) Developer tooling ([C]Make, gdb, Git, Grunt, Maven, perf, psutil, sbt, Valgrind, Wireshark) Ubuntu, Debian, RedHat & Apple MacOS ops experience AWS Cloud computing (incl. SageMaker); Azure and some minor GCP exposure Agile development using XP, T/BDD, and DDD (paring, feedback, iterative, tidy first, etc.)
Languages	German, English, Spanish

All fluent.