Florian Leitner PhD

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PROFESSIONAL SUMMARY

AI and Machine Learning leader building high-impact AI systems that transform complex data into competitive advantage across capital markets and scientific domains. Currently Head of Machine Learning at ION Analytics, leading multidisciplinary teams of engineers and data scientists delivering large-scale NLP, search and generative AI solutions in mission-critical financial environments. Recognised for building high-performing distributed teams and guiding organisations through acquisition and transformation while maintaining technical excellence and delivery momentum. Deep expertise in large language models, semantic retrieval, inference optimisation and AI evaluation frameworks, underpinned by a PhD in BioNLP and internationally cited research. Combines technical depth with executive-level influence to define ambitious AI roadmaps, raise engineering standards and deliver reliable, scalable enterprise AI.

KEY SKILLS & EXPERTISE

- ✓ **AI Engineering Leadership**
- ✓ **Large Language Models & Generative AI**
- ✓ **Production-Scale Machine Learning Systems**
- ✓ **Inference Optimisation & Low-Latency Architectures**
- ✓ **Semantic Search & Information Retrieval**
- ✓ **Agentic AI & Workflow Automation**
- ✓ **MLOps & Model Lifecycle Management**

- ✓ **AI Evaluation & Benchmarking Frameworks**
- ✓ **Distributed Systems & Scalable Architecture**
- ✓ **Technical Roadmap Definition & Delivery Ownership**
- ✓ **Cross-Functional Stakeholder Alignment**
- ✓ **Executive Communication & Commercial Translation**

CAREER HISTORY

ION Analytics

Head of Machine Learning   *May 2021 – Present*

- ➤ Lead multiple cross-functional Machine Learning and Data Engineering teams delivering NLP, search and generative AI systems supporting global capital markets workflows across IPO, M&A and credit products.
- ➤ Defined and executed the organisation's AI technical roadmap, aligning model development, infrastructure and product priorities with commercial objectives.
- ➤ Designed and deployed agentic AI workflows automating document ingestion, entity resolution and structured data generation at production scale, achieving human-level performance in structured extraction accuracy.
- ➤ Architected a natural language query capability over complex financial datasets achieving sub-100ms latency while significantly improving product accessibility and client adoption.
- ➤ Embedded structured continuous improvement practices across engineering teams, enabling autonomous delivery of complex LLM-based initiatives.
- ➤ Standardised value stream mapping across critical AI delivery pipelines, improving prioritisation clarity and execution predictability.
- ➤ Partnered with senior product and commercial leaders to translate market requirements into scalable AI solutions with measurable operational impact.

Engineering Manager   *Sep 2019 – Apr 2021*

- ➤ Led a team of 10 engineers during post-acquisition integration following Selerity's acquisition by ION Analytics.
- ➤ Delivered core search capabilities for a flagship enterprise platform serving capital markets participants.
- ➤ Re-architected search using natural language retrieval over Elasticsearch, accelerating user access to relevant financial intelligence.

- ➢ Directed optimisation of a real-time content recommendation engine, reducing infrastructure footprint and delivering annual cost savings exceeding $100k.
- ➢ Established performance management and mentoring frameworks to elevate technical standards and support career progression.

Selerity Inc.
Chief Technology Officer   *May 2018 – Aug 2019*

- ➢ Led a distributed engineering organisation of 25 engineers and data scientists developing AI systems for real-time financial intelligence.
- ➢ Owned end-to-end AI architecture across multilingual NLP pipelines processing news, research and financial communication streams.
- ➢ Directed development of latency-sensitive BERT-based topic classification systems supporting trading and risk workflows.
- ➢ Balanced product velocity with architectural robustness during high-growth scaling phase culminating in successful acquisition by ION Analytics.
- ➢ Acted as executive interface between engineering, investors and commercial leadership.

Senior Data Scientist   *Sep 2015 – Apr 2018*

- ➢ Designed and improved large-scale information extraction systems for financial entities across multilingual streaming data.
- ➢ Led engineering of a real-time chat analytics engine supporting capital markets decision-making.
- ➢ Enhanced low-latency message streaming infrastructure, reducing system load and improving processing reliability.
- ➢ Implemented continuous model evaluation practices to strengthen classification performance and robustness.

ACADEMIC CAREER

IE University, Faculty Member   *Mar 2018 – Feb 2020*
Universidad Politécnica de Madrid, Juan de la Cierva Fellow   *Feb 2014 – Aug 2015*
Spanish National Cancer Research Centre, Postdoctoral Researcher   *Mar 2012 – Feb 2014*
Spanish National Cancer Research Centre, PhD Researcher   *Aug 2006 – Feb 2012*
Institute of Molecular Pathology, Vienna, Masters Researcher   *Jul 2003 – Jul 2006*

EDUCATION & QUALIFICATIONS

PhD in Molecular Biology and Bioinformatics (Distinction)
Universidad Autónoma de Madrid *(2006 – 2012)*

MSc in Molecular Biology
Universität Wien *(2001 – 2006)*

ADDITIONAL INFORMATION

Academic Contributions: *20+ peer-reviewed journal articles including 6 as first author • h-index 19 with 2,800+ citations • Organiser of international BioCreative benchmarking initiatives • First-author publication in Nature Biotechnology • https://scholar.google.com/citations?user=EkXLlysAAAAJ*

Technical Stack: *LangChain • LangFuse • vLLM • LiteLLM • Hugging Face • Unsloth • Elasticsearch • Solr • Lucene Kafka • Spark • Scikit-Learn • Pandas • PyTorch • TensorFlow • MLflow • AWS (incl. SageMaker) • Azure (incl. ML and AI Foundry) • Databricks • Python • Java/Scala • TypeScript/JavaScript • Scala • Go*

Languages: *English (Native) • German (Native) • Spanish (Fluent)*