David Salinas

✉ david.salinas.pro@gmail.com
🌐 geoalgo.github.io
⌨ Github
in Linkedin
⑤ Google scholar

Professional Summary

- Senior Research Scientist specializing in Large Language Models with extensive experience in evaluation pipelines, multilingual model training, and collaborative AI research.
- Heading evaluation efforts of a €37M EU consortium developing multi-lingual and open LLMs.
- Strong publishing track record with 6,800+ citations and h-index of 26.
- Experienced in deploying scalable ML systems at AWS and developing open-source frameworks.

Professional Experience

2025–Present   **Group Leader OpenEuroLLM at ELLIS Institute**, *Tübingen*, Germany

- Leadership & Strategy:
  - Lead evaluation Work Package for the consortium (one of the three technical core Work Packages)
  - Contribute to pre-training and post-training pipeline architecture and design
  - Authored internal technical roadmap and technical onboarding document
  - Established GitHub repository and task board for consortium-wide project tracking and collaboration
  - Managed hiring process for 8 positions: wrote job post, organized interviews, and handled negotiations
- Technical Contributions:
  - Tuned open-weights LLM judges to match proprietary model performance
  - Evaluated 20,000+ model/task combinations for Open-sci-ref-0.01 release of 1.7B parameter models
  - Built benchmarking infrastructure for systematic model comparison and reproducible analysis
  - Created multilingual pre-training datasets by machine-translating high-quality English data

2024–Present   **Senior Research Scientist at University of Freiburg**, *Freiburg*, Germany

- Research focus: model evaluation, AutoML for LLMs, and foundational model architectures.
- My team achieved 2nd place in the Kaggle AutoML Grand Prix competition and won a $20,000 prize.
- I co-developed TabPFN-TS which led the GiftEval forecasting leaderboard for three months.

2024–Present   **Scientific Advisor at Distill Labs**, *Berlin*, Germany

- Advise Berlin-based AI startup on LLM research, evaluation, and product development.

2020–2024   **Senior Applied Scientist at Amazon**, *Grenoble*, France

- Lead developer of **Syne Tune**, an open-source Hyperparameter Optimization library that is now used in two AWS services.
- Developed a transfer-learning method to learn default configurations of AutoGluon Tabular that achieved a win rate of 54% against the best tabular methods while decreasing latency by 20%.

2019–2020   **Senior Machine Learning Scientist at NAVERLABS Europe**, *Grenoble*, France

- Proposed an inductive bias improving compositionality and sample efficiency of question-answering.

2015–2019   **Senior Applied Scientist at Amazon**, *Berlin*, Germany

- Proposed and implemented **DeepAR**, a neural forecasting model which had a significant impact on the field (cited 2,900+ times) and that got released as an AWS service.
- Developed production forecasting system for labor planning surpassing human expert accuracy, deployed across all Amazon warehouses globally.

2013–2015   **Post Doc at Inria**, *Sophia Antipolis*, France.

Education

2010–2013   **PhD in Computer Science at Grenoble Alpes University**, Grenoble, France.

2007–2010   **BSc and MSc at Ecole Normale Supérieure de Lyon**, Lyon, France.

Main Current Research Interests

Large Language Models. ICML 2025, Arxiv2025a, Arxiv2025b.

AutoML. ICML 2020, 2023 & 2025, NeurIPS 2025a & 2025b (Spotlight), AutoML Conf 2022 & 2024.

Time-series. NeurIPS 2016 (Oral) & 2019, AISTATS 2019, IJF 2020, JMLR 2020, NeurIPS 2025w.

Selected High-Impact Publications.

○ DeepAR (IJF2020) forecasting model - widely adopted in academia and industry - cited cited 2,900+ times.

○ Syne Tune (AutoML 2022) - HPO framework integrated into two AWS production services.

○ TabRepo & TabArena (AutoML 2024 & NeurIPS 2025 Spotlight): strong performance gain to AutoGluon – the current best tabular prediction method.

Scientific Publication and Citation Records

Citations. 6809 citations, h-index: 26, i10-index: 32 (Google Scholar Oct 2025).

Tutorials & Research Schools. AutoML Conf 2023, MESS Summer School 2024, AutoML School 2025, Oxford Machine Learning Summer School 2025.

Reviewing. AutoML-Conf (area-chair). NeurIPS, ICML and ICLR (reviewer).

Open-source

I am a core developer of `Syne Tune` (Hyperparameter Optimization), `SlurmPilot` (Python wrapper for Slurm experiments) and was a core-developer of `Gluon-ts` (forecasting) and `Datawig` (data imputation).

Selected Publications

H. Nguyen, V. May, H. Raj, M. Nezhurina, Y. Wang, Y. Luo, M. Vu, T. Nakamura, K. Tsui, V. Nguyen, **D. Salinas**, M. Richter, X. Son, and J. Jitsev. Mixturevitae: Open web-scale pretraining dataset with high quality instruction and reasoning data built from permissive-first text sources. **Arxiv 2025**.

M. Nezhurina, J. Franke, T. Nakamura, T. Carstensen, N. Ajroldi, V. Komulainen, **D. Salinas**, and J. Jitsev. Open-sci-ref-0.01: open and reproducible reference baselines for language model and dataset comparison. **Arxiv 2025**.

M. Arbel, **D. Salinas**, and F. Hutter. Equitabpfn: A target-permutation equivariant prior fitted networks. **NeurIPS 2025**.

N. Erickson, L. Purucker, A. Tschalzev, D. Holzmüller, P. Mutalik Desai, **D. Salinas**, and F. Hutter. Tabarena: A living benchmark for machine learning on tabular data. **NeurIPS 2025 D. & B. Track 2025 (Spotlight)**.

D. Salinas, O. Swelam, and F. Hutter. Tuning LLM judge design decisions for 1/1000 of the cost. **ICML 2025**.

S. Hoo, S. Müller, **D. Salinas**, and Frank Hutter. The tabular foundation model tabPFN outperforms specialized time series forecasting models based on simple features. **NeurIPS Workshop 2024**, 2024.

David Salinas and Nick Erickson. Tabrepo: A large scale repository of tabular model evaluations and its automl applications. **AutoML-Conf 2024**.

D. Salinas, J. Golebiowski, A. Klein, M. Seeger, and C. Archambeau. Optimizing hyperparameters with conformal quantile regression. **ICML 2023**.

D. Salinas, M. Seeger, A. Klein, V. Perrone, M. Wistuba, and C. Archambeau. Syne tune: A library for large scale hyperparameter tuning and reproducible research. **AutoML-Conf 2022**.

D. Salinas, H. Shen, and V. Perrone. A quantile-based approach for hyperparameter transfer learning. **ICML 2020**.

A. Alexandrov, K. Benidis, M. Bohlke-Schneider, V. Flunkert, J. Gasthaus, T. Januschowski, D. Maddix, S. Rangapuram, **D. Salinas**, J. Schulz, L. Stella, A. Türkmen, and Y. Wang. Gluonts: Probabilistic and neural time series modeling in python. **JMLR 2020**.

D. Salinas, M. Bohlke-Schneider, L. Callot, R. Medico, and J. Gasthaus. High-dimensional multivariate forecasting with low-rank gaussian copula processes. **NeurIPS 2019**.

J. Gasthaus, K. Benidis, Y. Wang, S. Rangapuram, **D. Salinas**, V. Flunkert, and T. Januschowski. Probabilistic forecasting with spline quantile function rnns. **AISTATS 2019**.

F. Biessmann, T. Rukat, P. Schmidt, P. Naidu, S. Schelter, A. Taptunov, D. Lange, and **D. Salinas**. Datawig: Missing value imputation for tables. **JMLR 2019**.

D. Salinas, V. Flunkert, J. Gasthaus, and T. Januschowski. Deepar: Probabilistic forecasting with autoregressive recurrent networks. **IJF 2020**.

T. Januschowski, J. Gasthaus, Y. Wang, **D. Salinas**, V. Flunkert, M. Bohlke-Schneider, and L. Callot. Criteria for classifying forecasting methods. **IJF 2020**.

M. Seeger, **D. Salinas**, and V. Flunkert. Bayesian intermittent demand forecasting for large inventories. **NeurIPS 2016 (oral)**.