Aurore Gosmant

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TECHNICAL SKILLS

Programming Languages: Python, R, SQL, Git, Bash, Cursor.

Gen AI & Machine Learning: MMM (Causal/Bayesian), MCMC, LLM tuning, GPT/LLAMA, Scikit-learn, PyTorch.

Data Science & Analysis: NumPy, Pandas, Polars, Streamlit, Plotly, Gurobi.

Cloud & MLOps: AWS (SageMaker, EC2, S3), Docker, Snowflake, MLflow, Google Workspace API, Meta/X API.

EXPERIENCE

Senior Data Scientist

Nov 2024 - Present

Known Global San Francisco, US

• Lead advanced Marketing Mix Modeling (MMM) development using Causal and Bayesian inference for clients such as HP, St Jude, and MSK, generating +8.6% KPI lift and optimizing media budget allocations of \$80M+/year.

- Drives innovation by developing and overseeing Skeptic Labs, a cutting-edge suite of 24 Streamlit apps that integrate Marketing APIs, LLM prompt fine-tuning, GPT API use, and advanced statistical and ML models to automate analyses, generate audiences, keyword ideations, analyze videos, etc. resulting in \$1M+ per month in licensing revenue.
- Coordinate automated audit workflows for 7 clients in parallel, deploying end-to-end pipelines (Data Lake, Python, Streamlit, Google Workspace API) to analyze 500+ social media marketing campaigns, representing \$100M+/year in budget and identifying \$30.9M/year in incremental revenue.
- Manage 2 data scientists, mentor 3 junior data analysts, and act as hiring manager for Social data science team.
- Main point of contact for MMM and Social data science initiatives with senior leadership, ensuring strategic crossfunctional collaboration with clients and internal teams to ensure deliverable quality, and IP innovation.

Data Scientist Apr 2023 - Nov 2024

Known Global

San Francisco, US

- Optimized \$8.2M marketing budget for 2024 using Causal and Bayesian MMM models, analyzing 13 multi-platform media budgets (Search, Social, TV, OTT, print, display) and presenting results to client senior leadership for HP.
- Implemented a Budget Optimizer modeling diminishing returns and saturation curves to optimize digital campaign budgets using Gurobi and validate MMM models, using ML architectures including XGBoost with 76% accuracy.
- Prototyped and deployed over 10 Streamlit tools based on digital marketing algorithm analysis to drive business development and marketing audits, including automated video and creative analysis.
- Implemented automated audit workflows using Data Lake, Python, Streamlit, and Google Workspace APIs (Google Slides, Google Sheets API), improving operational efficiency by 70% and parallelization of client audits.

Senior Data Analyst

Jan 2022 - Apr 2023

Known Global

San Francisco, US

- Developed the marketing audit department for over 8 clients by analyzing social media algorithms using advanced statistics and developer APIs from Meta, LinkedIn, and TikTok.
- Developed and deployed a long-term predictive Machine Learning model using XGBoost, achieving 80% accuracy on TV impressions based on Nielsen AMRLD data across different networks and audiences up to 3 fiscal quarters.
- Designed innovative A/B and geo-tests to measure incremental campaign effectiveness, and conducted research to optimize marketing campaigns and present results to clients.

Data Scientist NLP Intern

June 2021 - Jul 2021

United Nations

New York, US

• Prototyped an early warning NLP tool to identify conflict determinants using information retrieval, tokenization and semantic modeling. Raised \$181,000 to develop this system internally for anticipating political escalations and conflicts based on PDF field reports.

EDUCATION

Columbia University | MSc. Operations Research | GPA: 3.68

New York, US

Specialization: Machine Learning, NLP, Statistics, Simulation, Optimization, Applied Data Science.

Telecom Paris | Diplôme Grande Ecole d'Ingénieur | GPA: 3.89

Paris, FR

Lycée Sainte Geneviève (Ginette) | PCSI / PC

Versailles, FR

Interests & Spoken Languages

Spoken Languages: French (native), English (bilingual), Spanish (fluent) and Mandarin (beginner). **Interests**: Basketball (+14 years), Pastry, Kitesurf, Debating and Traveling (Africa 4 years, USA 5 years).