Thomas DAMBRIN

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EXPERIENCE

Quantitative Developer - Société Générale Corporate and Investment Banking, Risk Division
Banking Company, New York City (USA)
September 2023 – Present
- Develop, maintain, release Python libraries with API wrappers, OOP templates for DQ/YAML, Time Series and NLP utils. Used by 1000+ collaborators
- Monitor the Bank risk exposure by automating the computation of risk metrics on Fixed Income and Equity derivatives e.g Stress Tests, VaR, SVaR
- Work with the Front Office to implement ETLs to monitor live intraday trading (1mn latency), augment deal data with categories and historize
Tech stack: *Git, MySQL, Poetry, PySpark, Python (Pandas/Pandera/Scikit/NLTK/etc), REST APIs*

Data Engineer & Scientist - Mazars, Data Advisory Team
Financial Audit & Tech Consulting, Paris (France)
June 2022 – August 2023
- Architect and implement data lakes and warehouses, optimize queries speeding up to 80% for a real estate industry leader with GB sized datasets
- Develop, deploy and maintain a web application for an energy industry leader uniformizing HR data from 100+ countries and 20+ ERPs solutions
- Leverage and fine tune NLP models to create meaningful audit processes pipelines, develop a web application for interaction and data annotation
- Set up Azure instance from scratch along with batch and streaming ETLs for healthcare claims recommendation, orchestrate online learning updates
Tech stack: *AWS, Azure, Bash, Celery, CI/CD, ElasticSearch, Git, MongoDB, MLFlow, Python (Pandas/Scikit/Spacy/etc), Snowflake, SQL, Talend, VueJS*

Software Engineer - ETIC INSA Technologies
INSA Lyon junior enterprise, won best French junior enterprise in 2019, Villeurbanne (France)
September 2021 – December 2022
- Build, deploy and maintain the vehicle maintenance system of a B2B startup in transportation leading to a 3 consecutive projects with the JE
- Frame and track app development, provide technical advice to students on two €20K+ projects with 4 months end-to-end delivery processes
Tech stack: *AngularJS, AWS (Beanstalk, RDS, S3), Javascript, PostgreSQL, Flask, FastAPI*

Backend Engineer Trainee - Worldline, Digital Banking Center
FinTech company, Villeurbanne (France)
May - August 2021
- Develop back-end components and authentication/authorization services (SSO, OAuth2) for a customer-facing banking mobile application
- Interconnect 5 transactional systems into a single REST API allowing platform-agnostic transaction management and information retrieval
Tech stack: *CI/CD, Keycloak, Kotlin, OAuth2, Spring*

Computer Science Tutor - INSA Lyon
January - May 2021
- Host weekly trainings and mocks to 2nd year students, improve GPA from 40% to ~80% | *Algo/Design methodology, Java basics, OOP fundamentals*

EDUCATION

Master in Telecommunication Engineering - INSA Lyon, Ranked Top 10% (GPA eq. 4.0/4.0)
September 2019 - May 2022
AI (Game theory, ML, RL, DL), Blockchain, Database Management, Network Architecture and Protocols, Programming, Signal Processing

Academic Exchange Program - The Hong Kong University of Science & Technology
January – May 2022
Blockchain and Fintech, Data Mining, Deep Learning Architectures, Finance, Machine Learning

Bachelor of Engineering - Polytech Annecy-Chambéry, Valedictorian (GPA eq. 4.0/4.0)
September 2017 - May 2019
Automation, Computer Science & Electronics, Engineering Fundamentals (Chemical Engineering, Physics, Maths)

PROJECTS

Personal - **Music Graph visualizer** ⬤ /tdambrin/deezer-graph
2024
- Develop a simple VueJS app and a FastAPI on top of Deezer to search albums, artists, tracks and visualize them as a graph with interactions (try it!)

Personal - **Snowflake Extension – Worksheets Versioning** ⬤ /tdambrin/sf_git
2024
- Develop, release and maintain a Python based CLI for Snowflake worksheet versioning (fetch from/push to UI IDE), paired with a GitHub Action

Academic - **Game Theory Research Project** ⬤ /SDMStudio/sdms
2021
- Explore mathematical properties and implement heuristic search driven planning algorithms for multi agent zero-sum NF and Bayesian games

Academic - **Deep Learning Approach For Traffic Engineering**
2021
- Fetch, preprocess, augment graph data and to try and solve Interior Gateway Protocol (IGP) weight optimization problem with neural networks

Academic - **Image Segmentation Research Initiation Project**
2020
- Write an SOTA of graph-based approaches and reimplement random walks (Python) with User interface to visualize parameters tuning results

ADDITIONAL INFORMATION

Cloud Components: AWS, Docker, Microsoft Azure, Snowflake, Heroku
Frameworks: AngularJS, ELK Stack, Express, Spring, VueJS
Programming Languages: Bash, C, C++, Go, Haskell, HTML, Java, Javascript, Kotlin, Makefile, SQL, Typescript, Python
Languages: English (Fluent), French (Native)
Hobbies: Boxing, Basketball, Chess, City Pop Art, Fashion, JumpRope, Modeling, R&B, Surf, Philosophy (Ethics, Nietzsche)

HACKATONS

Agorize & Safran: Blackout Challenge – National Open Innovation Challenge, 3rd prize among 150+ teams
2021
Accenture: Hackathome – National Coding Battle, 3rd prize among 80+ teams
2021