



Thomas DAMBRIN

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EXPERIENCE

Societe Generale Corporate and Investment Banking – Risk Division, Quantitative Developer September 2023 – Present
Financial services/Banking Company, New York City (USA)

- Monitor the Bank risk exposure by automating the computation of risk metrics on Fixed Income and Equity derivatives e.g stress tests, VaR, SVaR
 - Develop, maintain, monitor and release Python libraries for internal system APIs and databases. Used by teams worldwide for reporting or analysis
- Tech stack: *Python, Git, MySQL, REST APIs*

Mazars – Data Advisory Team, Data Engineer & Scientist Consultant June 2022 – August 2023
Audit & consulting group, Paris (France)

- 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
- Tech stack: *AWS, Azure, Bash, Celery, CI/CD, Elasticsearch, Git, MongoDB, Python (Pandas/Scikit/Spacy/etc), Snowflake, SQL, Talend, VueJS*

ETIC INSA Technologies – Software Engineer September 2021 – December 2022
INSA Lyon junior enterprise, won best French junior enterprise in 2019, Villeurbanne (France)

- Build, deploy and maintain the vehicle maintenance system of a transportation industry actor leading to a 3 consecutive projects with the JE
 - Frame app development and manage students by providing technical lead on two €20K+ projects with 4 months end-to-end delivery processes
- Tech stack: *AngularJS, AWS (Beanstalk, RDS, S3), Javascript, PostgreSQL, Flask*

Worldline – Digital Banking Center, Backend Engineer Trainee May - August 2021
FinTech company, Villeurbanne (France)

- 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-independent transaction management and information retrieval
- Tech stack: *CI/CD, Keycloak, Kotlin, OAuth2, Spring*

INSA Lyon – Computer Science Tutor January - May 2021

- Prepare and host weekly trainings to 1st and 2nd year students | *Algorithmic methodology, Design methodology, Java basics, OOP fundamentals*
- Write documents on Algorithmic methodology for beginners, support sheets for Java development and trainings on expected exam problems
- Improve GPA from 30% to 80% over a semester and result in 2 students choosing CS specialization by breaking down the thinking processes


EDUCATION

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

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

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

ACADEMIC PROJECTS

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

Cryptocurrencies And Exchange Platform Analysis 2021
• Fetch, preprocess, store on a distributed cluster and back up open cryptocurrency rates and exchanges data for visualization & high-level analysis

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

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

ADDITIONAL INFORMATION

Open-Source Contribution: Developed and released a Python based CLI for Snowflake worksheet versioning (cf GitHub)

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: Acrylic Painting, Boxing, Basketball, Chess, City Pop Art, Fashion, Jumping Rope, Modeling, R&B, Philosophy (Ethics, Nietzsche)

HACKATONS

Agorize & Safran: Blackout Challenge – National Open Innovation Challenge, 3rd prize among 150+ teams 2021
• Design a visual light communication (VLC) based indoor guidance system to help blind people and pitch the solution to Safran's top management

Accenture: Hackathome – National Coding Battle, 3rd prize among 80+ teams 2021
• Optimize a cloud services distribution (multi-metrics combinatorial optimization) over multiple servers through a randomized greedy algorithm