# 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 1<sup>st</sup> and 2<sup>nd</sup> 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 Automation, Computer Science & Electronics, Engineering Fundamentals (Chemical Engineering, Physics, Maths)

September 2017 - May 2019

## **PROJECTS**

## Personal - Music Graph visualizer (7)/tdambrin/sp-graph

2024

- Develop a simple VueJS app and a FastAPI on top of Spotify to search albums, artists and tracks and visualize them as a graph with interactions Personal - Snowflake Extension - Worksheets Versioning ( ) /tdambrin/sf git
- 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 \(\infty\) \(\sumsymbol{SDMStudio/sdms}\)

2021

2024

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

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 SoA 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: 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

Accenture: Hackathome - National Coding Battle, 3rd prize among 80+ teams

2021 2021