# B. SAM MEJLAOUI

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#### **SUMMARY**

10+ years of academic and professional study in Data Science, Fintech, and Computational Linguistics, with 6+ years of experience in Machine Learning and AI development. Skilled in Neuroinformatics, Quantum NLP, and Fintech, with a strong command of statistical analysis, and SQL.

## **EXPERIENCE**

## Financial Analyst, Investment Analyst, Investment Banker - FinData Analytics

2024 - Present

- Conducted valuations of bonds and stocks, achieving a 95% accuracy rate in market predictions over a 12-month period.
- Performed cost-volume-profit (CVP) analysis across diverse scenarios, driving a 12% increase in profitability for product lines.
- Analyzed and valued investment opportunities in bonds and stocks, achieving a portfolio growth of 18% year-over-year.

#### Prompt Engineer, Machine Learning Specialist, Artificial Intelligence Developer - Sam AI Insights

2023 - Present

- Designed reusable prompt templates, enhancing large language model outputs by 25% in accuracy and relevance.
- Integrated LLMs into machine learning pipelines, improving data preprocessing efficiency by 35%.
- Built applications using LLMs to automate business processes, saving 30% in resource time.

#### Data Scientist, Data Analyst, Data Collection Operator - Sam Agency

2021 - 2024

- Built regression and machine learning models, applying statistical analysis to derive actionable insights, improving decision-making accuracy by 20%
- Cleaned, organized, and visualized data using Power BI, Tableau, and SQL, creating dashboards that reduced reporting time by 30%.
- Collected, sorted, and evaluated datasets, ensuring 95% accuracy in data integrity and readiness for analysis.

## Linguist Data Scientist, Computational Linguist - LinguaData

2019 - 2021

- Designed NLP models, improving multilingual processing accuracy by 25% for datasets spanning 120 languages.
- Escalated translation algorithms with syntactic parsing, reducing error rates by 30% and supporting 50,000+ translation requests.
- Increased real-time language recognition and context-aware translations by 40%.

#### **SKILLS**

- Programming Languages: Python, R, SQL, Java, Julia, Matlab, Scala, Rust, Perl, TCL, Erlang/Elixir, Wolfram, C, C++, JavaScript, XML.
- Tools & Frameworks: Proficient in machine learning and AI tools (Keras, TensorFlow, PyTorch, Scikit-learn, Pandas, NumPy), data visualization and BI tools (Tableau, Power BI, Matplotlib, Seaborn), and big data technologies (Apache Spark, Hadoop, DynamoDB).
- Core Competencies: Strategic Trading Systems, Machine Learning, Artificial Intelligence, Natural Language Processing.
- Languages: Arabic, German, Italian, French, Mandarin, and English.

## **EDUCATION**

#### Stanford University, Stanford School of Medicine

Major: Biomedical Data Science

Minor: Deep Learning; AI for Healthcare

Coursework: Research Ethics, Data Analysis, Cloud Computing, Bioinformatics, Genomics, AI/ML, Medical Software, Neural Networks, Large Language Models, Epigenetics, Transcriptomics, Proteomics, Clinical and Wearable Data, Imaging Data, Medical Data Science, Bioengineering, Surgical Robotics, AI in Medicine.

## WorldQuant University

Master of Science: Financial Engineering

Minor: Applied AI; Data Science

Coursework: Risk Management, Optimization, Data Science, Computational Finance, Statistical Analysis, Algorithmic Trading, Predictive Modeling, Advanced Statistical Techniques, Decision Trees, Linear Regression, Time-Series Analysis.

## Ibn Tofail University

(Graduated at top of class, GPA:3.9/4.0)

Bachelor of Arts (B.A.), Linguistics (cum laude)

Minor: Natural Language Processing; Computational Linguistics

Research: "Computational linguistics roles in developing Artificial Intelligence with a Focus on Semantic Role Labeling and Multilingual NLP"

Related Studies: Machine Learning, Computational Linguistics, Natural Language Processing, Data Structures, Algorithms, Statistical Modeling, and Deep Learning. Awards: HCIA-Cloud Computing V5.0, HCIA-Big Data V3.0, HCIA-Cloud Service V3.0, HCIA-Datacom V1.0, HCIA AI V3.5.

## RESEARCH INTERESTS

Neuroinformatics, Brain-Machine Interfaces, Digital Twin Technology, Quantum NLP, Ethical AI, Algorithmic Governance, Biomedical/Medical Data Science, Applied AI, Computational Linguistics, Corpus Linguistics, and Cryptologic Language Analytics.

## **CERTIFICATIONS**

• AWS Cloud Practitioner, Microsoft DP- 600, Google Data Analytics, Meta Data Analyst, IBM Data Analyst, IBM Data Analytics with Excel and R, IBM Data Science, Fractal Data Science, IBM Data Engineer, Meta Database Engineer, and Google Cloud Data Analytics (More).

## **COURSEWORK**

Stanford University: CS106A, CS106B, CS109, CS110. AI CS221, ML CS229, NLP CS224N, CS224S, CS224W, CS246, CS329X, EE263, DATASCI 112.

Harvard University: CS50, CS50 for JDs, CS50 for MBA, CS100, CS164, CS E-23a, CS E-33a, CS E-39b, CS E-80, CS E-75, CS E-76, CS E-295.

Harvard T.H. Chan School of Public Health: DS101 (R Basics, Visualization, Probability, Inference and Modeling, Wrangling, Regression).

Gies College of Business – UIUC: ACCT 100, ACCT 200, ACCT 300, FIN 200, ECON 101, ECON 102, FIN 101, FIN 200, FIN 200.

MIT OpenCourseWare: 6.0001, 6.0002, 6.005, 6.006, 6.009, 6.031, 6.033, 6.034, 6.036, 6.041A, 6.042J, 6.004, 6.028, 6.046J, 6.828, 6.829, 6.841, 6.852, 6.853, 6.864, 6.868, 6.8000, 6.801, 6.803, 6.820, 6.825, 6.832, 6.231, 6.437, 6.438, 6.867, 6.869, 15.071, 15.075J, IDS.012, IDS.131, 14.310x, Mega-R1-R7.