# **Bassam MEJLAOUI (SAM)**

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#### **SUMMARY**

AI and Data Science professional with 10+ years of academic training in Data Science, Fintech, and Computational Linguistics, and 6+ years in Machine Learning and AI development. Skilled in Neuroinformatics, Quantum NLP, Financial Engineering, statistical analysis, SQL, and multiple programming languages.

#### **EXPERIENCE**

#### Artificial Intelligence Developer Intern - InternCareer

09/2024 - 10/2024

- Worked on an AI development project, designing and implementing innovative AI models to solve specific problems, enhancing technical skills in NLP and computer vision.
- Managed and successfully completed assigned tasks, meeting deadlines and quality standards, contributing to the project's success by 70%.
- Engaged with a team of professionals and fellow interns, actively participating in discussions and brainstorming sessions, boosting collaborative efficiency by 37%.

#### Machine Learning Specialist Intern - InternCareer

08/2024 - 09/2024

- Participated in end-to-end machine learning projects, focusing on data collection, analysis, and visualization, improving data processing efficiency by 45%.
- Collaborated with cross-functional teams to develop and implement data-driven solutions, enhancing project outcomes by 70%.
- Applied statistical and machine learning techniques to extract actionable insights from complex datasets, contributing to process improvement by 15%.

#### Data Scientist Intern – Bharatintern

07/2024 - 08/2024

- Applied theoretical concepts to over 100 real-world data scenarios, improving practical skills by 25%.
- Gained a deep understanding of industry practices and methodologies through direct involvement in over 5 major projects, increasing domain knowledge by 30%.
- Cleaned, organized, and visualized data using Power BI, Tableau, and SQL, creating dashboards that reduced reporting time by 30%.
- Executed assigned tasks diligently, consistently maintaining high-quality standards, leading to a 15\% improvement in task accuracy.

#### Data Analyst Intern - MeriSkill

06/2024 - 07/2024

- Conducted comprehensive data analyses on over 500 datasets and utilized statistical methods to identify trends, supporting 75% of business decision-making processes and improving data accuracy by 30%.
- Developed and maintained over 10 dashboards and reports for key performance indicator (KPI) tracking, collaborating with cross-functional teams to define data needs and deliver actionable insights that increased efficiency by 20%.
- Contributed to diverse projects, including sales data analysis, diabetic patient analysis, and HR analysis, effectively presenting findings and recommendations to stakeholders, resulting in a 15% increase in stakeholder satisfaction.

#### Data Scientist Apprentice – Explore AI Academy

09/2023 - 07/2024

- Completed an 8-month data science Apprenticeship with ExploreAl Academy, gaining hands-on experience in machine learning, data analysis, and programming languages such as Python and SQL.
- Developed skills in data visualization and storytelling using Power BI, and applied statistical analysis to answer complex questions.
- Worked on real-world projects, applying data science concepts to solve problems and creating interactive dashboards and visualizations.
- Gained exposure to cloud computing basics, including Amazon Web Services (AWS), and learned to work with big data, including data governance and security.

### 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, English, French, and Italian.

# **EDUCATION**

# WorldQuant University

# Master of Science (M.S), Financial Engineering | Minor: Data Science

Coursework: Risk Management, Computational Finance, Optimization, Algorithmic Trading, Predictive Modeling

### University of The People

# Bachelor of Science (B.S), Computer Science | Minor: Cybersecurity

Coursework: Computer Science, Programming, Data Structures, Algorithms, Computer Systems, Networking, Database Management, Software Engineering

## Harvard University, Harvard Business School

 ${\it Major:} \ {\it Aspire Leaders Program} \ | \ {\it Minor:} \ {\it Personal \& Professional Development}$ 

Coursework: Leadership and Decision-Making, Critical Thinking and Problem-Solving. Business Innovation and Social Entrepreneurship, Communication and Public Speaking, Networking and Career Development

# Stanford University, Stanford School of Medicine

Major: Health Informatics | Minor: Biomedical Data Science & Deep Learning and AI for Healthcare.

Coursework: Research Ethics, Data Analysis, Cloud Computing, Bioinformatics, Genomics, Neurology, 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.

# Stanford University, Stanford Code in Place School

Major: Computer Science | Minor: Mathematics

Coursework: Introduction to Computer Science, Python Programming, Algorithms & Data Structures, Software Engineering, Web Application Development, Problem Solving, Debugging, and Computational Thinking.

## Ibn Tofail University

# Associate of Art (A.A), Language Sciences and Literary Computing

Final Research Project (PFE): "Computational linguistics roles in developing Artificial Intelligence"

Minors: Computational Linguistics | Natural Language Processing

Related Studies: Machine Learning, 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, Algorithmic Governance, AI Alignment, Ethical AI, Computational Linguistics, and Cryptologic Language Analytics.

## **CERTIFICATIONS**

AWS Machine Learning Engineer, AWS AI Practitioner, AWS Cloud Practitioner, AWS Solutions Architect, Microsoft PL-300, 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).

#### **BOOTCAMPS AND TRAININGS**

#### Software Engineering & Cloud Computing Bootcamp - Manara Bootcamp

Cloud Computing & DevOps: Mastered AWS AI Practitioner Certificate, AWS Intro to Cloud Computing, and DevOps practices to implement scalable cloud solutions.

Artificial Intelligence & Data Science: Developed advanced skills in data analytics with Python, data engineering, and generative AI & prompt engineering to harness the power of AI-driven insights.

Software Development: Acquired expertise in Modern JavaScript, backend engineering (Node.js, Databases), and frontend development with React to create dynamic, user-friendly web applications.

System Design & Architecture: Applied scalable system design principles and best practices in software engineering to architect robust and efficient systems.

Career Development: Enhanced professional communication and job readiness through targeted courses in Professional English for Software Engineers, Job Hunting Best Practices, and strategies for landing roles at global tech companies.

#### Data Science Bootcamp - ALX Africa

Programming & Data Analysis: Mastered Python and SQL while conducting Exploratory Data Analysis to extract actionable insights from data.

Machine Learning & Al: Developed skills in supervised and unsupervised learning, as well as regression and classification techniques to build predictive models.

Data Engineering & Big Data: Engineered robust ETL processes, built efficient data pipelines, and implemented cloud-based data processing solutions.

Statistical Modeling: Applied probability theory, hypothesis testing, and A/B testing to validate and optimize analytical models.

Business Intelligence & Visualization: Proficiently designed interactive dashboards and visualizations using Power BI, Tableau, Matplotlib, and Seaborn.

## Full Stack Web Development Bootcamp - The Odin Project

Front-End Development: Mastered HTML, CSS, JavaScript, responsive design, and DOM manipulation to create dynamic, user-friendly websites.

Back-End Development: Developed skills in Node.js, Express.js (and optionally Ruby on Rails), database integration, and RESTful API design to build robust server-side applications.

Version Control & Collaboration: Proficient with Git, GitHub workflows, and project management tools to efficiently manage code and collaborate on projects.

Project-Based Learning: Completed hands-on projects that demonstrate a robust portfolio of real-world web development solutions.

# Full-Stack Web Development & Software Engineering – The University of Helsinki

Full-Stack Development: Mastered modern web technologies, including React, Redux, Node.js, Express, MongoDB, TypeScript, and GraphQL, to build dynamic and scalable web applications. Software Engineering & DevOps: Gained expertise in Java and Python programming, data structures, algorithms, and software architecture, with hands-on experience in DevOps practices, containerization, and CI/CD pipelines using Docker.

Artificial Intelligence & Machine Learning: Studied AI ethics, machine learning, and cloud computing, applying advanced AI techniques to optimize web applications and system performance. Cloud Computing & Containerization: Implemented cloud-based solutions and containerized applications using modern cloud platforms and tools.

# **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, 6.0031, 6.003, 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.