

DANIAL AMIN

AI Tech Lead | Head of AI | Senior ML Engineer

+358 46 801 4291 | [✉ writertodanialamin@gmail.com](mailto:writertodanialamin@gmail.com) | [in linkedin](#) | [portfolio](#) | [github](#) | [Espoo, Finland](#)

PROFILE SUMMARY

Experienced AI and machine-learning leader who has designed, delivered, and led enterprise-scale data and analytics solutions. I consistently evaluate existing architectures, formulate clear roadmaps, and convert strategic business objectives into robust, production-ready AI systems. My technical expertise spans cloud native MLOps, large language model engineering, and GPU-accelerated optimization pipelines. My commercial acumen is demonstrated through the knowledge gained during my MBA and my successful presales engagements, which define the scope, effort, and measurable value of the solution. I have led and collaborated with cross-functional engineering teams, raised development standards, and embedded responsible AI principles, enabling organizations to innovate securely and at pace.

SKILLS AND COMPETENCIES

Management & Leadership: Effective Communication, Analytical Reasoning, Conflict Management, Problem Solving, Self-Organization, Project Management, Design Thinking, Resource Management, Critical Reasoning, Strategic Thinking

AI & DS: Predictive Machine Learning, Reinforcement Learning, Deep Learning, Deep Neural Networks, RNNs & GANs, Bayesian Optimization, Generative AI, Large Language Models, Explainable AI, Retrieval Augmented Generation, Exploratory Data Analytics, Predictive and Perspective Analytics, Time Series Analysis & Forecasting

Programming Languages & Libraries: Python, R, Pytorch, PySpark, Tensorflow, Keras, Pandas, Scipy, Scikit Learn, Matplotlib, Seaborn, NLTK, MATLAB, LabView, LangChain, LangSmith, Docker, Spacy, Dragonfly, SQL

Softwares & Developer Tools: Tableau, PowerBI, Looker, Minitab, SPSS, Visual Studio, PyCharm, Anaconda, JupyterLab, Dockers

Cloud Architecture: Microsoft Azure, Google Cloud Platform, Amazon Web Services

Languages: English (C1), French (A1), Urdu (C2), Punjabi (C1)

EXPERIENCE

- LLM & AI Scientist for SDIC** Nov. 2024 - Date
Samsung Design Innovation Center, Samsung Electronics
Onsite, France
 - ▶ Developing the internal design companion for product and computational designers, combining the Generative and Predictive AI solutions to support data-driven design optimization.
 - ▶ Spearheading development of multi-stages unstructured DB to act as ground truth for the LLM to enhance the data-driven design optimization process at SDIC.
- AI & Data Science Lead** Sep. 2023 - Nov. 2024
i13 Ventures Studio
Remote, Ireland
 - ▶ Spearheaded the development and implementation of advanced AI solutions utilizing Large Language Models (LLMs), including GPT variants and open-source models, significantly enhancing product capabilities and market reach for over 300 startups.
 - ▶ Led the adoption of cutting-edge technologies including Retrieval Augmented Generation (RAG), vector databases for efficient similarity search, and multi-modal bots combining text, image, and audio processing capabilities.
 - ▶ Implemented lean and agile practices in AI development, including continuous integration/continuous deployment (CI/CD) pipelines for ML models, reducing product development lifecycle by 4 weeks and enhancing overall efficiency.
- Head of Data Analytics — Lead Data Scientist** Feb. 2023 - Sep. 2023
Abacus Global
On-site, Pakistan
 - ▶ Led a cross-functional team of 15+ data scientists and engineers, fostering collaboration and driving data-centric strategies that significantly enhanced global enterprise clients' AI capabilities across various industries.
 - ▶ Architected and implemented a big data analytics framework on Google Cloud Platform (GCP), utilizing BigQuery for data warehousing and Dataflow for stream processing, improving data processing speed by 40%.
- Lead Data Scientist** Feb. 2022 - Feb. 2023
Automat Solutions Inc
Remote, USA
 - ▶ Developed and implemented a smart battery performance optimization system using deep reinforcement learning and GPU-accelerated computing (CUDA), enhancing system efficiency by 36% and extending battery life by 25%.
 - ▶ Leveraged advanced machine learning techniques, including Genetic Algorithms and Bayesian Optimization for multi-objective optimization of manufacturing processes, achieving a 200% increase in operational throughput and 50% improvement in energy efficiency.
- ML Engineer — Lead ML Engineer** Feb. 2021 - Feb. 2022
Omdena Inc
Remote, USA

- ▶ Led the development and deployment of advanced image classification models for social impact projects, increasing model accuracy by 12% through innovative techniques like transfer learning and data augmentation.
- ▶ Mentored a team of 5 junior data scientists, fostering a culture of continuous learning and innovation in AI/ML technologies.
- **Assistant Manager** Aug. 2017 - Nov. 2022
Government of Pakistan On-site, Pakistan
 - ▶ Developed and implemented AI-based predictive maintenance and anomaly detection systems for critical engineering applications in the aerospace sector, significantly reducing operational risks and maintenance costs by 35%.
 - ▶ Led the design and deployment of a machine learning-powered fuel consumption optimization system, enhancing the accuracy of estimates and reducing error from 2.5% to less than 0.5% at full capacity loading through advanced data analytics and modeling techniques.

EDUCATION

- **University of Vaasa** Jan. 2025 – Date
Doctorate of Science Distance Learning, Finland
- **Rennes School of Business** Sep. 2023 – Sep. 2024
Masters in Business Administration On-Campus, France
- **MIT Institute for Data, Systems and Society** Jan. 2024 – May 2024
Data Science and Machine Learning: Making Data-Driven Decisions Distance Learning, USA
- **University of Wisconsin, Madison** Aug. 2022 – May 2023
Micro Masters in Business: Data, Insights and Analytics Distance Learning, USA
- **University of California San Diego** Aug. 2021 – Mar. 2023
Micro Masters in Data Science Distance Learning, USA
- **Massachusetts Institute of Technology** Aug. 2019 – Nov. 2023
Micro Masters in Statistics and Data Science Distance Learning, USA
- **Institute of Space Technology** Sep. 2013 – Aug. 2017
B.S in Aerospace Engineering On-Campus, Pakistan

PROJECTS

- **Bob-The Startup Advisor**
 - ▶ Developed and deployed an enterprise level contextualized and grounded large language model based solution for supporting startups through ideation and incubation stage.
 - 🔗 **Tech Stack:** Python, LangChain, Pinecone, Azure, LangServe, FastAPI
- **Sandy-The Financial Advisor**
 - ▶ Finetuned and contextualized a language model with financial analysis knowledge to provide help to financial advisors.
 - 🔗 **Tech Stack:** Python, LangChain, Pinecone, Azure, LangServe, FastAPI
- **Design and Development of Integrated Intelligence Platform for a Leading Bank**
 - ▶ Implemented a project for providing insights to three different departments (Risk Management, Customer Experience, and Operations) at a leading bank in Caribbean to support their digital transformation journey.
 - 🔗 **Tech Stack:** Google Cloud Platform, BigQuery, Looker, Python, SAP S4 HANA

COURSES & CERTIFICATIONS

- Expert Certification in **Artificial Intelligence** by **European Information Technologies Certification Institute** [EITCA](#)
- Professional Certificate in **Data Analytics** by **Google** [Coursera](#)
- Professional Certificate in **Project Management** by **Google** [Coursera](#)
- Professional Certificate in **Data Science** by **IBM** [Coursera](#)
- Specialization in **Deep Learning** by **Deeplearning.ai** [Coursera](#)
- Specialization in **Natural Language Processing** by **Deeplearning.ai** [Coursera](#)
- Complete Career track of **Data Scientist** by **365DataScience** [365DataScience](#)
- Expert track in **Data Science Fundamentals on Microsoft Azure** by **CloudSwyft and Microsoft** [FutureLearn](#)
- Nano degree in **AI Programming with Python** by **Udacity** [Udacity](#)
- Developer Certification in **Data Analysis with Python** by **FreeCodeCamp** [FreeCodeCamp](#)