

MD ASADUZZAMAN

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Websites, Portfolios, Profiles

- www.linkedin.com/in/mdasaduzzaman-04104549
- <https://github.com/asaduzzaman-git>

Skills

- HuggingFace, Ollama
- Pandas, NumPy
- Elastic search, SQL
- Postman, Jenkins
- Confluence, JIRA
- 5G New Radio
- LangChain, RAG
- Seaborn, Matplotlib
- Tableau, Kibana, Power BI
- Python, javascript
- IBM Watson, WatsonX
- Large Language Models(LLM)

Professional Summary

I am an experienced professional with a background in AI, Data Science, and Telecommunications, currently working as a Solution Owner at Nokia. With 6 years of experience at Nokia, I have demonstrated my expertise in multiple roles within the organization. In my current role, I specialize in AI and Data Science, focusing on Full Stack - Conversation Flow Manager (CFM). I excel in gathering functional requirements, defining user experiences, and crafting the technical architecture of use cases. My ability to understand the customer's business context, requirements, objectives, and expectations enables me to derive their actual needs. Some of my key skills include Jenkins, Conversational AI, Elasticsearch, UIX, IBM Watson, Kibana, postman, Confluence, Jira, Semantic Search, Python, SQL, Natural Language Processing (NLP), Generative AI, Prompt Engineering, and Large Language Models (LLM). Prior to this role, I served as a Network Integration and Databuild Engineer at Nokia, managing a range of responsibilities related to SRAN, LTE, and 5G. My career journey has equipped me with a robust skill set and valuable experiences in AI, data science, and telecommunications. I am passionate about solving complex problems and creating innovative solutions that drive business success.

Work History

Solution Owner - AI Digital Assistant

02/2021 to Current

Nokia – Lisbon, Portugal

AI & Data Science

Full Stack – Conversation Flow Manager (CFM)

Achievements

- **FAQ Chatbot:** Designed and implemented a chatbot for authenticated and guest users using Azure Managed Services, OpenAI LLM APIs/functions, and RAG system integrated with IBM Watson. Achieved up to a 20% reduction in ticket creation for stakeholders.
- **Text-to-SQL bot:** Built a chatbot that enables users to query features based on business logic and algorithms, delivering results aligned with stakeholder requirements and achieving over 82% accuracy.
- **Text-to-Command bot:** A chatbot capable of interpreting natural language queries and executing platform commands/APIs to retrieve answers from ELK or API endpoints.
- **Knowledge-driven bot:** Implemented a **"Talk to Your Knowledge"** chatbot leveraging RAG systems (semantic with hybrid search) and Reciprocal Rank Fusion (RRF) techniques for optimal chunk extraction and text generation.
- **Classification** prompt engineering for Intent Recognition: Built prompts capable of resolving complex user intents across 20+ topics with a precision of 92%, handling queries from hundreds of users daily.
- **Query Reformulation** Prompts: extract principal keywords and filter out stop words based on business requirements, significantly improving IR with accuracy.

Role Responsibilities

Solution Architect: Gather and analyze business requirements, translate them into technical specs, create designs/PoCs, document in Confluence, manage Jiras, and collaborate to ensure alignment with project goals.

System & Data Engineering: system integration (APIs, data mapping, lifecycle), optimizing ELK queries, creating knowledge graphs between data, validating datasets, building testing frameworks, and developing dashboards for conversational insights.

Conversational AI: Develop and manage AI-driven chatbots with IBM Watson, integrating multi-skill workflows and RAG system. Combines retrieval-based search with generative models for real-time, accurate, and contextually relevant responses.

Product Evangelist & Communication: Act as the voice of the customer, conducting TechTalks and monthly demos to the stakeholders.

Network Integration and Databuild Engineer

10/2018 to 02/2021

Nokia – Lisbon, Portugal

Databuild for SRAN, LTE and 5G :

- Fulfill the requirements of the local team goals and create the site commissioning file(SCF) .
- Analyze the existing rules, change the parameters and find the solutions for different objects.
- Implement new objects with different parameterizations with values into the templates.
- Creating the database for the site configuration file.
- Analysis the baseline of default parameters and create templates for 2G, 3G and 4G.
- Apply new conditions into the tool for different versions of software releases.

- Working in a team to deliver the SCFs according to the local teams' requirements.
- Working for project modernization into Airscale.
- Automate the Data Fill for SRAN and 5G to meet Nokia standards input file using MongoDB.
- Troubleshooting and comparing the structures, different versions, databases, etc.
- Using different tools and applications : Zmail, Citrix, NetAct, Protean and Mayday.
- Uses macros, VBA and Excel formulas to optimize the process.

Network Integration (NI) :

- Working in a RETs and Probo team for remote integration .
- Configure the RETs according to the serial numbers.
- Correct antenna angels for mechanical and electrical tilts .
- Check the Test calls for 3G , LTE and 5G using Probo tools .
- Update Plans for alarms into the NetAct and provisioning by the operation manager.
- Monitoring the NI tracker to take necessary steps.
- Add the site into the monitor by NetAct .
- Check the alarms and give support to the Field engineers.

Customer Service

01/2018 to 09/2018

Lycamobile – Lisbon, Portugal

- Handle customer queries and requests via email and prioritize those from the local office, ensuring all are addressed within the defined SLA (service-level agreement).
- Acknowledge, investigate, and resolve email queries, collaborating with support and complaints teams to ensure optimal service delivery.
- Perform follow-ups for every email to ensure proper case closure, providing satisfactory resolution emails to customers after thorough investigation.
- Log all customer emails in the tracker, manage reports, and obtain necessary approvals from the complaints team for escalated issues.
- Managed incoming Network connectivity tickets efficiently, ensuring customer satisfaction and maintaining product-related databases.

Supervisor

02/2015 to 10/2017

Subway Hackney Limited – London, United Kingdom

- Managing Inventory and shifts
- Managing Payroll and Schedules
- Give support for the ERP software

Technical Support Engineer

03/2010 to 04/2013

Universal Engineering Company Ltd – Dhaka, Bangladesh

- support BTS commissioning
- Remote Support (24/7) during the Swap
- Guide the BTS on-air PAT test.
- Work with different vendor BTSs in the field
- Confirm E1 transmission loop test from BTS to BSC

- Monitoring the BTS channel status
- Call test support.

Engineer Intern

10/2009 to 01/2010

Grameenphone Ltd – Dhaka, Bangladesh

- Internship at Grameenphone in Transmission Planning, Celebration Point. In this internship period, I have worked with the Non-Legacy Transport Network with specialization in Synchronization and Data Communication Network (DCN). I have put all my effort to make a clear visual picture of Grameenphone Transmission Synchronization network, DCN OSPF core Diagram also visits their BSC and Transmission Section.

Awards

- TSIA 2021 STAR Awards Finalist - Recipient as a team of AI Digital Assistant
- Mobile Networks Quality Awards 2022 Advancing quality as a competitive differentiator - AI Digital Assistant

Certifications

- IBM Data Science Professional Certificate
- IBM AI Engineering Professional Certificate
- Prompt Engineering for ChatGPT
- Building and Evaluating Advanced RAG
- Vector Databases: from Embeddings to Applications

Education

Master of Science: Computing

01/2014

Glyndŵr University - United Kingdon(UK)

Bachelor of Science: Electronics and Telecommunication Engineering

01/2010

ATISH DIPANKAR UNIVERSITY OF SCIENCE & TECHNOLOGY - Dhaka, Bangladesh

Projects

• Benchmark Test Framework for Answer Evaluation

Developed a Python-based AI framework leveraging large language models (LLMs) to evaluate answers against golden standards using relevance scoring. This artifact empowers stakeholders to effectively assess and improve response quality.

• Retrieval Grader Framework

Developed a Python AI artifact that uses an LLM-based re-ranking system with explanations to minimize hallucinations in LLM-generated text, which enhances reliability.