

SYTAB RAHI



BASIC INFORMATION

Islamabad, Pakistan

sib.syyab@gmail.com, +92 313-5375376

Website: pk.linkedin.com/in/syyab-rahi-5b702829

SUMMARY

Seasoned Data Scientist with 9 years of expertise in NLP, Computer Vision, and Data Science. Proficient in Python and R, adept at developing impactful predictive models and leveraging advanced analytics to extract strategic insights. Recognized for driving business growth through the application of cutting-edge technologies. Seeking opportunities to contribute NLP and Computer Vision skills for innovative data-driven solutions.

PROFESSIONAL EXPERIENCE

Principal Software Engineer – AI

Jan 2022 – Present

Ibex Global

At Ibex Global, a multinational leader in Customer Support and Experience services, I played a pivotal role in leveraging cutting-edge natural language processing techniques:

OpenAI-Powered SME Assistant:

- Achieved an exceptional 60% acceptance rate in a challenging production environment.
- Helped with design and implementation of solution architecture, enhancing overall system efficiency.
- Enhanced the performance of Large Language Models (LLM) through prompt optimization.
- Automated knowledge base maintenance with ETL pipelines, incorporating HTML parsing and intelligent OCR.

Automation of Technical Support Assistance:

- Implemented chatbots to automate technical support department, resulting in an outstanding 85% reduction in manual technical support efforts.
- Streamlined the visualization and analysis of chatbot data, identifying and rectifying misclassification, leading to a remarkable 70% decrease in chatbot mistakes.

Real-time Model Deployment and Monitoring:

- Spearheaded the deployment of models with real-time inference and implemented MLOps for monitoring, reducing model training time by a notable 50%.

Skills: LLMs, OpenAI, Microsoft Azure, MLOps, Chatbot Development, NLP, AWS SageMaker, Google Cloud Platform, Google BigQuery, PostgreSQL, Dialogflow, Python

Data Scientist (Computer Vision)

Oct 2019 – Jan 2022

Darvis Inc.

"**Rapid Hygiene Check (RHC)**" is an AI powered iOS application used at the Covid-19 wards of multiple clinics and hospitals.

- Trained object detection and semantic segmentation models; 100% elimination of human interaction in sensitive clinical wards.
- Built data preprocessing and augmentation pipeline, generalized model for various deployment environments; enhanced model performance by 10%.
- Converted AI models to CoreML for edge device deployed; increased model inference speed by 2x.

The "**Synthetic Data**" R&D project required the use of synthetically generated images from 3D animations to train object detection and segmentation models.

- Lead a team for the project, managing and mentoring 2 junior AI engineers.
- Curated 50+ R&D experiments and ensuring their execution, documenting and presenting R&D progress and results to the CTO and CEO.
- Devised a pipeline to train AI models which required only 15% of real images supported by 85% of synthetically generated images.

Skills: Computer Vision, Research and Development, Core ML, Object Detection, YOLO, synthetic data

Data Scientist (NLP)

Dec 2018 – Oct 2019

AiXprt

AiXprt is a UK based fin-tech startup, working for financial institutions to automate the mundane processes related to audits using AI techniques.

- Detection and extraction of financial tables from PDF files using object detection and custom algorithms; 15% hike in model performance.
- Using transformer-based NLP models to understand the semantic meaning of text for audit compliance; added 5% more to the classification model f1-score.

Skills: OCR, BERT, Faster-RCNN, YOLO, SSD, OpenCV, Python

Data Scientist

Oct 2017 – Dec 2018

ADDO AI

ADDO AI is a multi-national AI company, providing their services to prominent international clients.

Singapore's Largest Taxi Service:

- Chatbot using dialogflow to automate Lost & Found service
- Effective communication with client for requirement gathering, documentation and deployment.
- Chat-flow designing, development and deployment; Replacing 90% of the human intervention.

Japan's leading insurance company, as a team lead to analyze policy surrenders and benefit payouts within various age groups by using:

- Data preprocessing, visualization and analysis
- Association rule mining to extract frequent add-on policies.
- Customer churn (Policy surrender) prediction; 85% accuracy.

Localized language interpretation engine for integration with chatbots.

Data analysis and reporting for Singapore's transport company to identify user demand and optimize routes.

Skills: Tableau, Google Dialogflow, GCP BigQuery, SQL, NLP, Data Engineering, Data Analysis, Python

Data Scientist (NLP)

Feb 2017 – Oct 2017

UnQa

- Design, develop, and integrate AI for a text-based flagship product to understand and respond to user queries using a chatbot.
- Design AI architecture to address decision making based on user queries.

Skills: Tableau, RASA NLP, RASA Core, SQL, RNN, LSTM, Text analytics, Python

Research Associate

Sep 2016 – Feb 2017

Data Science Lab, ITU, Lahore

- Data preprocessing, feature engineering, and data analysis.
- Mapping crime cases using geo coordinates for real-time data visualization.
- Training ML models to predict crime incident at police station granularity.

Skills: R programming, Tableau, Python, Machine Learning

Senior Data Analyst

Jan 2015 – Apr 2016

Predictify.Me

- Data collection, preprocessing, visualization, analysis and reporting
- Commercial value assessment of US public data sets.
- Statistical Learning on American Community Survey Database.

Skills: R programming, Tableau, Machine Learning, RapidMiner, Python

CERTIFICATION

- Classical Computer Vision (Bleed-AI)
- Learn Python from scratch (Udemy)
- Basics overview of big data Hadoop (Udemy)
- Developing Data Products (Coursera)
- Reproducible Research in R (Coursera)
- Exploratory data analysis using R (Coursera)
- Getting and cleaning data using R (Coursera)
- R programming (Coursera)
- Data Scientist's toolbox (Coursera)

EDUCATION

Master of Science in Computer Science (Major: Data Science)

2016 – 2018

Information Technology University, Lahore

Thesis: Citation classification using natural language processing (Published in Smart ICT 2019 conference)

https://doi.org/10.1007/978-3-030-53187-4_39

Bachelors of Electronics Engineering

2007 – 2011

International Islamic University Islamabad

Project: Intelligent washing machine