

THOUSEEF SYED

Principal Chatbot Engineer



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SUMMARY

Highly motivated and technically skilled Principal AI & Chatbot Engineer with 7+ years of experience architecting, deploying, and scaling conversational and agentic AI systems. Proficient in LLM integration, NLP/NLG, RAG pipelines, and knowledge orchestration, with a proven ability to deliver enterprise-ready AI agents that solve real-world problems and drive measurable impact.

Experienced in leading end-to-end AI development—from research and design through deployment—across Generative AI, Machine Learning, and agentic automation frameworks. Recognized for strong cross-functional collaboration, communication, and stakeholder engagement, consistently aligning AI initiatives with organizational strategy. Published researcher with a foundation in Applied Cognition & Neuroscience, combining deep technical expertise with strategic leadership to deliver responsible, high-impact AI solutions in fast-paced enterprise environments.

EDUCATION

Masters of Science | The University of Texas at Dallas

Applied Cognition & Neuroscience, specialized in Computational modeling and Artificial Intelligence (AI) & Machine Learning (ML)
May 2020

Bachelors of Science | PES Institute of Technology

Electronics & Communication Engineering
August 2017

SKILLS

- **Programming Languages:** Python, JavaScript, C++, R, Verilog, MATLAB
- **AI/ML Frameworks & Tools:** TensorFlow, PyTorch, Keras, Scikit-learn, Hugging Face Transformers, LangChain, LangGraph, NLTK, spaCy, OpenCV, Caffe, FastAPI
- **Conversational AI & Automation:** Dialogflow, UiPath, Voiceflow, LLMs (GPT, Claude, LLaMA), Pinecone (Vector DB), n8n, Slack Bolt
- **Cloud & Platforms:** Google Cloud Platform (GCP), AWS, Firebase
- **Data & Analytics:** SQL, Pandas, NumPy, Matplotlib, RStudio, Amplitude, Segment
- **DevOps & Project Tools:** Kubernetes, Git, GitHub, Bitbucket,
- **Environments:** macOS, Linux, Windows
- **Project & Collaboration Tools:** Jira, Agile, Kanban

PROFESSIONAL EXPERIENCE

Principal Chatbot Engineer

Seamless AI | Aug 2024 - Present

- Designed and deployed “Sara” — an omnichannel AI agent across Email, Chat, and Voice — integrated with Salesforce and Pinecone Vector DB; partnered with Support, Sales, RevOps, and Legal to align compliance and business goals.
- Architected Tier-1 & Tier-2 AI support automation by integrating Salesforce, Voiceflow, and enterprise systems; launched a custom bot widget for ticket creation, collaborating with Product and CX teams to improve efficiency.
- Drove chatbot deflection rate from 62% to 90% by redesigning workflows with Support, adding dynamic troubleshooting flows, and refining intent/entity recognition — reducing Tier-2 escalations by 74% and cutting support costs.
- Built and deployed AI Evaluation Agents to score support channels (Email, Chatbot, Voice) and analyze Salesforce case threads; worked with Enablement and Support Ops to deliver personalized coaching, driving 88% deflection.
- Created a Leadership Dashboard consolidating agent performance metrics with insights into escalations and product failures; collaborated with Engineering and QA to accelerate fixes and product enhancements.
- Operationalized AI governance with a Red Team Simulation agent (via n8n + OpenAI moderation), running adversarial tests with Slack-based alerts; partnered with Security and Compliance while mentoring teams through AI playbooks.

Sr. Applications Developer

CrowdStrike Inc., | Jan 2023 - March 2024

- Created a cutting edge Integration Bot that connects ServiceNow and Slack to accelerate ticket management system using JavaScript & Python.
- Smart features like creation of incidents, fetching approvals, fetching incidents was achieved to mediate the incoming traffic of tickets.
- Configured and integrated 100 plus API calls between Slack and ServiceNow for 8000 users of the Company.
- Designed and deployed unique integrations at enterprise level that improved Slack functionalities and enhanced the productivity by 75% using AWS EC2 instance in Bot's architecture.
- Developed up to 3 Bots that improved interoperability between CrowdStrike systems and maximize business workflows using generative AI and LLMs.

Bot Developer

Brixton Group Inc. (Client: Verizon Communications). | Dec 2020 - Dec 2022

- Developed Chatbot proof of concepts that helped to solve up to 5 business related queries using Dialogflow.
- Created Bots to automate form recognition using AI/ML algorithms that cut down the manual process by 60%.
- Designed up to 3 Bots that use NLP & NLG, which aided the tech support team by increasing the productivity by 50% .
- Monitored and supervised a supply chain bot that generated revenue up to \$12 million dollars.

CERTIFICATIONS

- Certified in Google Assistant Development with Actions on Google
- Certified in Computer Vision: OpenCV, SSD & GANs
- Certified in AI & Deep Learning using Tensorflow
- Certified in AWS ML Foundations
- Certified in Generative AI with Large Language Models
- Certified in Machine Learning with Python
- Certified in Python Development
- Certified in UiPath Foundation to Advanced Level

Machine Learning Researcher & AI/ML Lead

The University of Texas at Dallas | January 2019 – December 2020

- Lead a team to create a virtual interactive lab assistant exclusively for the ArtScilab.
- Established a network of over 20 users within the framework of the lab.
- Created a knowledge base of over 100 FAQs & hence shortened the on boarding process by 30%.
- Created a front-end Django based Dialogflow application using Google Cloud Platform.
- Received Approval by Google for Beta Testing the virtual assistant.

Research Assistant

PES Institute of Technology | July 2016 – March 2018

- Analyzed data sets of 10 years and developed a model that would aid Fund managers to maximize returns.
- Performed prediction for 3 months of Net Asset Value of Mutual Funds using Support vector Machine models
- Developed and deployed SVM based machine learning models for prediction and validation.
- Achieved 99.82% accuracy towards forecasting the model and published in the [IEEE journal](#)

ACADEMIC PROJECT AND RESEARCH PUBLICATIONS

Chatbot using Llama 2 7B LLM : [Notebook](#) | November 2023

- A simple comparison between Basic and Advanced Chatbot was performed using the Llama 2 7B Large Language Model (LLM)
- Loaded the model and tokenizer by setting up the environment with Hugging Face transformers, PyTorch and accelerators
- Generated responses by creating the Llama pipeline and used Gradio Chat Interface for a robust communication between the user and the chatbot

Mutual Fund NAV Prediction using cascaded SVM models | July 2017– March 2018

- Successfully created and analyzed Mutual Funds Dataset for the 10 fiscal years
- Evaluated prediction of Net Asset Value using Support Vector Machine models for the financial dataset
- Achieved 99.82% accuracy towards forecasting the model and published in the [IEEE journal](#)

BESSO : Virtual Interactive Lab Assistant | January 2019 – May 2020

- Designed and developed the architecture of the virtual assistant with 40 plus intents and entities.
- Created a seamless conversation experience across all platforms like telephone, website and application.
- Enabled natural and rich interactions of over 20 plus users and the assistant through analytics NLP and NLU.
- Established a knowledge base of over 100 FAQs and shortened the on boarding process by 30%.

Traffic Sign Classification using CLAHE : [A Deep Learning Approach](#) | January 2020 – May 2020

- Performed Classification of Traffic signs using CLAHE to detect signs in challenging conditions.
- Secured 95% accuracy post training and tested on other frequent traffic signs

Speaker Recognition on Apollo 11 Corpus : [A Study using different Machine Learning Models](#) | Aug 2019– Dec 2019

- Performed Speaker ID on 183 speakers using KNN, CNN and i-vectors
- Achieved 85% Top-5 accuracy using CNN when compared to other models

COVID-19 Chatbot : [Dr. Pandemic](#) | June 2020–Aug 2020

- Successfully designed and deployed a COVID-19 rapid response chatbot using NLP and NLU
- Optimized narrowed and localized search using Big Query and Google Maps API.