

VAIBHAV RAMGOPAL MALPANI

vaibhav.malpani1995@gmail.com

+91-8898183275

Specific Expertise

- **8.5 years'** experience in web application development using **Python, Java and NodeJs**.
- Expert in **RESTful API Development** with frameworks including **Spring, Flask and Express Framework**.
- **Google Developer Expert** (<https://g.dev/IVaibhavMalpani>)
- **Strong cloud proficiency with:**
 - **AWS:** Lambda, EC2, SageMaker, Textract, Forecast, Personalize, Rekognition, S3, RDS, ECS, StepFunctions, SecretsManager, IAM, WAF, SQS, SNS, SES, VPC, API Gateway, CloudFront, Route 53, AWS CodeBuild, CloudWatch, EventBridge, Athena, Glue.
 - **GCP:** Cloud Run, Cloud functions, Pub/sub, dataflow, Vertex AI, GCR, BigQuery, Cloud Build, App Engine, Vertex AI, IAM.
- Proficient in **Natural Language Processing** using **NLTK and Spacy**.
- Proficient in **Python, NodeJS and Java Programming**.
- Skilled in **Oauth Integration** with ADFS server for multiple projects.
- Experienced in **CI/CD pipeline** setup with Gitlab, Github and AWS codebuild.
- Strong database knowledge: **MongoDB, Elasticsearch, BigQuery, Redis and MySQL**.
- Experience with **Dockerizing** Python and Node.js applications
- Proficient with Deploying Web Application on **GCP and AWS** using Serverless Technologies and MicroService Architecture.
- Experience writing **Databricks** jobs using **PySpark**.
- Proficient in **Linux, Shell Scripting**.
- Writes **Technical blogs** at <https://medium.com/@IVaibhavMalpani>
- Shared code at **Github:** <https://github.com/vaibhav-malpani>

Computer System Experience

OS Windows, Ubuntu

Database MongoDB, ElasticSearch, Redis, MySQL, BigQuery

Languages Python, NodeJS, Java 7.0

Framework	Spring, Hibernate, Flask, Django, Express	
Tools	Eclipse, PyCharm, VSCode	
Application Server	Nginx, Gunicorn, Tomcat	
Awards		
<ul style="list-style-type: none">• Stood 1st at AWS Deepracer League at AWS Summit, Mumbai (2019).• Got invited to AWS re:invent 2019 and 2022, Las Vegas.• Got invited for AWS Developer Summit 2019, Seattle.• Star performer for Lending Tree Chatbot Project• Star performer for DOW Project• Multiple times got Mad-A-Difference award in Libretto Project.		
Public Speaking and Community Engagement:		
<ul style="list-style-type: none">• Delivered AI-focused talks internationally in Sri Lanka, Kenya, Mauritius, and Philippines (Manila & Cebu).• Presented 40+ sessions across India on Serverless (pre-2023) and AI/ML (2023 onwards). Given 15+ online talks – YouTube Playlist		
Professional Experience:		
Nov 21 – Present	Incedo Inc.	Senior Software Engineer
Project I	Bizzy - Libretto	
Description	Libretto checks for and improves data integrity in your mortgage loan portfolio. Its comprehensive business rule engine scans your entire loan portfolio and identifies anomalies that could result in increased compliance risk, higher borrower complaints, or reduced loan valuations.	
Contribution:	<ul style="list-style-type: none">• Collaborated with clients to gather requirements and define system behavior• Developed modular, production-grade Python code aligned with business rules• Architected and implemented scalable cloud infrastructure using AWS (Lambda, S3, RDS, Step Functions)• Designed and executed Databricks ETL jobs using PySpark to process large loan datasets• Wrote and optimized MongoDB queries for high-performance data retrieval• Integrated services with CI/CD pipelines using AWS CodeBuild for smooth deployments• Ensured data quality and auditability through rule-based validations and logs	
Environment	Python, Databricks, AWS, MongoDB	

Feb 21 – Nov 21 **Capgemini Technology** **Consultant**

Project I **ExtendaRetail**

Description Working on Retail project for Swedish Client. Worked on POS terminal to solve various customer requirements and bug fixes.

Contribution:

- Requirement gathering from client
- Adding functionality as asked by client
- Solving Bugs related to CR.

Environment Java, Jira

Jan 17 – Feb 21 **Xoriant Solutions** **Software Developer**

Project I **CDI Address Standardization**

Description 7 million addresses from 10 countries (US, UK, CA, AU, DE, JP, CN, NL, FR, IN) have to be standardized in format of Address Line 1, Address Line 2, Address Line 3, City, State, Zip Code, and Country. We built a Machine learning model using BERT to understand the tokens and tag each word in appropriate address element.

Contribution:

- Was Leading a team of 4
- Requirement gathering from client
- Built Flask server for serving this as an API and deployed it using gunicorn
- Built BERT model for all countries
- Dockerized the whole application.

Environment Python, Azure Devops, BERT, docker

Project II **Knowledge Management Portal**

Description Knowledge Management Portal (KMP) is a Search engine for searching through all the PPT that are used in our Organization. All the PPT's presented to clients are uploaded to private cloud folder. KMP picks up the documents, Parses the document to convert it to JSON and uploaded to elasticsearch. Our search engine is built using LTR on elasticsearch which internally uses machine learning and have features as Number of Downloads, User ratings, keyword importance, etc. Important keywords from the PPT are extracted when the document is uploaded and these keywords are shown when user is searching for documents.

Project was dockerized and deployed on Google Cloud platform. CI/CD pipeline were implemented with gitlab server for seamless deployment.

Contribution

- Python Programming for Web application Development with Flask.
- Stored data on Elasticseach.
- Developed Searching Algorithm for searching PPTs using Machine Learning and LTR for Elasticsearch.
- OAuth Integration with ADFS Server.
- Saving important keywords on Redis for suggestions while typing.
- Configured OAuth with Internal ADFS Server for user login.
- Dockerized the whole application.
- Deployed the Project on GCP.
- Implemented CI/CD pipeline on gitlab.

Environment Python, Elasticsearch, Redis, git, Jira

Project III Document Classification and Entity Extraction

Description Project was focused on classifying documents that were given in PDF or Image format into 7 given types using natural language processing (NLP). One of the type was “Invoices” and entity extraction was done on invoice’s Image or PDF, to extract data like invoice number, invoice date, vendor name, Items bought along with their price, GST etc.

Contribution

- NLP for document classification
- Text Extraction using Google Cloud Vision for OCR and writing other algorithms for text extraction.

Environment Python, Google Cloud Vision, NLTK.

Project IV Blue Hexagon

Description BlueHexagon is a Cyber-security platform that makes use of deep learning techniques to help automatically to detect known and unknown network threats. We had built a dashboard and the data needed for the dashboard was queried from ElasticSearch and MongoDB.

Contribution

- Worked on ElasticSearch and MongoDB right from data injection (insert, bulk insert, upsert) to Aggregation Pipeline.
- I had to create queries and give it to backend team for execution.

Environment Java, MongoDB, Elasticsearch.

Project V Lending Tree Chatbot

Description Chatbot made using Google's Dialogflow. Bot was made available on Google assistant that can be accessed from phone and Google home. Bot was used to take values from user over voice or text and were given Loan offers from LendingTree API. Later on selection of an offer email and phone number were taken from user which is then passed on to LendingTree so that this information can be used as a lead for their further processing.

Contribution

- Creating the flow for chatbot on Google Dialogflow.
- Communicating with client for flow and showing demo every week.
- Writing backend logic for connecting with lendingtree and giving back appropriate responses
- Creating Chat Responses for the user.

Environment NodeJS, Google Dialogflow, Google Actions.

Project VI FAQ Chatbot

Description Build a FAQ chatbot for the organization to answer repetitive questions that gets asked to HR, Admin, Sysnet team.

Contribution

- Worked on creating the flow for dialogflow
- Created the backend in Node JS.
- OAuth integration with ADFS Server

Environment NodeJS, Google Dialogflow

Project VII DOW Chemical

Description Project was for creating a way to communicate between employees working on a DOW chemical factory. Motorola where using MOTOTRBO devices which had its own encryption called MBXML. We had to decrypt the message from the device and raise an alert if any.

Contribution Encryption and decryption of UDP data sent from MOTOTRBO device used in DOW chemical factory

Environment Java