



# AKHIL PANDARAPARAMBIL SURESH

## Software Engineer | Python

Experienced Software engineer with **4.5 years** of expertise in **full-stack development, API development, automation, ETL processes** and **AI integration**, delivering scalable and high-performance solutions. Proven track record of collaborating with cross-functional teams in **agile environments** to align technical solutions with business objectives.



## EXPERIENCE

### SENIOR SOFTWARE ENGINEER 27.01.2023 – 28.12.2024

Optum Global Solutions India Pvt. Ltd 2 Years

- Developed Python automation frameworks for Medical auditing by interacting with IBM PCOMM and SQL.
- Developed VBScript and VBA to automate tasks in Microsoft Excel and IBM PCOMM emulators.
- Developed full-stack web applications for a healthcare client utilizing Flask, React.js, Fatsapi (Rest API), Streamlit, Microsoft SQL Server, MongoDB, and Docker.
- Integrated Large Language Models (LLM) and AI/ML technologies into new and existing applications.
- Built custom internal tools to assist the development team and conducted multiple internal trainings.
- Created tools to consume live APIs, perform USPS data cleansing, implement Elasticsearch, utilized fuzzy matching and NLTK libraries for data engineering and ETL solutions.
- Managed version control with Git and worked with Azure cloud services.

### PYTHON DEVELOPER 16.01.2022 – 13.01.2023

Guidehouse India Pvt. Ltd 1 Year

- Implemented web automation, web crawling, data extraction, request spoofing, and other ETL operations using frameworks like Scrapy, Selenium, pandas, NumPy, and Requests.
- Assisted with Salesforce data loading and testing, developed shell/power scripts for system management, and conducted Python training for colleagues.
- Developed full-stack web applications using Flask, Django, SQL and Microsoft Power Apps.

### ASSOCIATE 24.08.2020 – 15.01.2022

Guidehouse India Pvt. Ltd 1 Year 5 months

- Developed Python scripts and optimized SQL queries to automate and verify multiple MIS reports.
- Demonstrated advanced Excel skills, including pivot tables, VLOOKUP, and data analysis.
- Designed and implemented detailed surveys using Qualtrics documentation with LaTeX Studio.
- Participated in the full project lifecycle from requirements gathering, estimation, development and deployments.
- Got training in .NET framework, Tibco Spotfire, R etc.

## CONTACT

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🔗 <https://github.com/akhilpsin>



## TECHNICAL SKILLS

### Programming Languages:

Python, SQL, VB Script, VBA,  
Golang, Linux

### Web Frameworks:

Flask, FastAPI, Django, React.js,  
Streamlit

### Testing & Automation:

pytest, smtplib, keyboard, PyWin32,  
PyAutoGUI, UIPath, Power Automate

### DevOps & Cloud:

Docker, Git, Azure

### Big Data & Databases:

Azure Data Factory, Elasticsearch,  
SQLAlchemy

### AI/ML & NLP:

Hugging Face (Transformers,  
Tokenizers, Datasets), Scikit-learn

### ETL & Data Processing:

Pandas, NumPy, Polars, Regex,  
Tableau

### Web Scraping & Parsing:

Scrapy, Selenium, Requests,  
BeautifulSoup, OpenCV, Playwright,  
pdfplumber, PyMuPDF, pytesseract

## CERTIFICATES

- **Microsoft Azure AZ-900:**  
Microsoft Azure Fundamentals
- **Data Analysis with Python:**  
IBM on Coursera
- **Agile Project Management:**  
Google on Coursera
- **Agile with Atlassian Jira:**  
Atlassian on Coursera

## PUBLICATIONS

### “Hospital Managing QR Code Web Application Using Django and Python”

- IJCRT, Vol 8, Issue 5 May 2020
- Link to paper:  
<https://ijcrt.org/papers/IJCRT2005507.pdf>
- **Description:** Development and implementation of a web application for hospital management, utilizing QR codes. This application is built using the Django web framework.

## LANGUAGE

- Malayalam- Native
- Englisch - C1
- Deutsch - A2
- Hindi - C1

## HOBBIES

- Reading
- Traveling
- Pencil Sketch
- Dance

## VISA STATUS

- German Opportunity Card (**Job Seeker**)
- Validity: 01.01.2025 – 31.12.2025

## EDUCATION

### BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING

05.08.2016 - 29.11.2020

APJ Abdul Kalam Technological University, Kerala, India

- Total Percentage: 73 %
- German Recognized ( ANABIN database )



## PROJECTS

### FastAPI Job Matching with Elasticsearch [ [GitHub](#) ] [ [Demo](#) ]

**Tech Stack:** FastAPI, Elasticsearch, Python, Docker, Pytest

**Description:** Designed and developed a FastAPI-based job matching API that efficiently retrieves and ranks job postings and candidates using Elasticsearch. The API supports relevance-based search, filtering by salary, skills, and seniority, and containerized with Docker

### IT Job Market Insights on Germany [ [GitHub](#) ]

**Tech Stack:** Python, Pandas, BeautifulSoup, Requests, Selenium, Tableau

**Description:** Conducted data extraction and analysis of IT job postings in Germany using web scraping techniques. Processed and cleaned job market data with Pandas and visualized key insights using Tableau. Automated data retrieval with Requests to track trends over time.

### RAG Context-Aware Chatbot with Phi [ [GitHub](#) ]

**Tech Stack:** Python, FAISS, SentenceTransformers, Ollama (Phi), PyMuPDF, CLI

**Description:** Built a modular Retrieval-Augmented Generation (RAG) chatbot powered by Ollama’s Phi model to answer queries based on uploaded PDFs. The system parses and chunks PDF documents, embeds them using SentenceTransformers, and indexes them with FAISS for fast semantic retrieval. Includes real-time streaming responses, hallucination filtering via keyword detection.

### Smart Meal Recommendation App [ [GitHub](#) ] | [ [Demo](#) ]

**Tech Stack:** Streamlit, Python, Pandas

**Description:** Developed an interactive meal recommendation web app that suggests trending meals, budget-friendly options, and personalized meal combos based on user preferences. Implemented user authentication, real-time meal selection, and order history tracking. Deployed the app on Streamlit Cloud.

### Dappy - Django Pet E-commerce Platform [ [GitHub](#) ]

**Tech Stack:** Django, Python, PostgreSQL, HTML, CSS, JavaScript

**Description:** Built a pet e-commerce platform that allows users to browse, search, and purchase pet-related products. Implemented features like product listing, user authentication, and order management. Integrated a PostgreSQL database for secure and scalable data storage.

Deggendorf, 6 May 2025