




AKASH SIVAKUMAR

Chennai, India

+919710644508 ✉ aksh.svkmr@gmail.com  <https://www.linkedin.com/in/aksivakumar/>
 <https://github.com/Akash080799>  <https://akash080799.github.io/Personal-Portfolio/>

Education

Amrita Vishwa Vidyapeetham

July. 2017 – Aug 2021

Bachelor of Technology in Electronics and Communication Engineering — (CGPA: 8.0 / 10.0)

Coimbatore, TN

Experience

Cognizant Technology Solutions

Aug 2021 – Present

Software Engineer, Associate

Chennai, TN

- Led development of a Pega Customer Service application to streamline form submissions received from the client's subsidiary web application, leveraging core rules (Sections, Data Transforms, Activities, Decision Tables, Validation Rules, Report Definitions, Data Pages, Connect-REST, Service Level Agreements) and improving processing time by 20% and case resolution efficiency by 60%.
- Implemented scalable workflows and data flows to enhance a healthcare application's functionality; integrated Apache Kafka to consume messages and leveraged Pega Queue Processors and Agents to automate work object creation and enable real-time, asynchronous data processing.
- Built Splunk dashboards to track 10+ API call outcomes, helping stakeholders monitor system reliability, assess feature performance, and drive data-informed decisions.

Combat Vehicles Research and Development Establishment (CVRDE), DRDO

May 2019

Research Intern

Chennai, TN

- Implemented available image processing techniques on the point cloud data of various terrains collected from various sensors and cameras mounted on defense applications, attempting to predict the terrain type through statistical analysis.

Projects

VegNet - A CNN-Based Image Classification System | *Python, Keras, Tensorflow*

Link: <https://github.com/Akash080799/VegNet-Classification>

- Designed a CNN-based image classification system to accurately classify various vegetables and market scenes, improving automation in agricultural processes. Implemented and optimized multiple model architectures, including custom CNN, VGG16, ResNet50, and InceptionV3, to improve classification accuracy.
- Achieved high testing accuracy of 90.6% through extensive hyperparameter tuning, early stopping, and model checkpointing, preventing overfitting and optimizing the model for real-world applications.

OTT - Movie Recommendation System | *Python, Pega PRPC, StreamLit, Flask, Rest-API, Docker, AWS ECS*

Link: <https://recommendationsystem-ak.streamlit.app/>

- Devised an end-to-end movie recommendation system incorporating collaborative filtering and content-based filtering algorithms to deliver personalized suggestions to users based on historical data and interactions.
- Converted the recommendation system into a Web API and integrated it into a Pega application for personalized movie suggestions.

Saline Solution Based Miniaturized Low-Frequency Dipole for UAV based River Monitoring Systems

Ansyz-HFSS, MATLAB. | Link: <https://ieeexplore.ieee.org/document/9708266>

- Proposed an innovative antenna minimization technique utilizing saline solution as a core material for low-frequency wire antennas, reducing their overall electrical length by 47%, achieving a return loss of approximately -50 dB, and enhancing bandwidth by 53%.

Technical Skills

Programming Languages & Libraries: Python (Numpy, Pandas, Scikit-learn, Keras & Tensorflow), Java, MATLAB

Platforms & Tools: Pega BPM (Versions 8.6, 8.23), Jira, Splunk Cloud, GitHub (Basic Proficiency), LaTeX

Web Technologies & Frameworks: Flask, Streamlit, HTML5, CSS3

Databases: SQL (MySQL, Oracle DB2), Google BigQuery

Data Visualization & Simulation Tools: Tableau, Ansys HFSS

Awards & Certifications

- Completed Professional Senior System Architect Certificate (**PCSSA**), provided by Pega in V.23, in December 2024.
- Received the “**Pat on the Back Award**” Certificate of Excellence from the client organization in November 2023, in recognition of the contributions made in transforming their application
- Completed Professional System Architect certification (**PCSA**) from PEGA in V 8.6, in April 2022.