AKSHEN DOKE

Relentless explorer of intelligence — human and artificial.

doke.akshen@gmail.com • https://www.linkedin.com/in/akshen/ • India

Summary

Product-minded technologist and Certified Scrum Product Owner with hands-on experience in machine learning research, cloud automation, and AI-driven product development. Adept at building with modern LLMs (Claude, OpenAI, Perplexity), Retrieval-Augmented Generation (RAG), and autonomous workflows using tools like LangChain. Skilled in integrating AI with MAKE (formerly Integromat), MCP pipelines, and automation-first architectures. Former Python trainer at FOSSEE with a strong track record in open-source evangelism, civic tech, and systems that bridge humans and machines for sustainable, high-impact outcomes.

Experience

Maxotopia Foundation — Mumbai, India

Co-Founder | This role helped me build my skills as a Product Owner. 10/2023 - 10/2024

Our mission is to transform the quality of living by fostering trust and greater collaboration between citizens and local governments.

- Spearheaded the development of the '**Let's Engage**' mobile application, which enables citizens to stay informed, raise issues, and submit complaints regarding their local wards in the city of Mumbai.
- Explored AI agent architecture for **automated triaging** of complaints based on urgency, locality, and department jurisdiction.

TerraAlto — Dublin, Ireland

Cloud Automation Engineer | Helped me understand how service-based IT cloud operates. 05/2021 - 06/2023

Looked after Managed Services for clients across multiple domains

- Worked on Amazon Web Services Cloud Provider which was used to host servers, services and backups.
- Deployed code pipelines, automated backups, provided customer support, and handled on-call duties.
- Created Scripts to save processing time for data collection.
- Created a documented process for the induction of new joiners.

FOSSEE, IIT-Bombay — Mumbai, India

Project Research Engineer | Wore multiple hats while in this position. 01/2017 - 06/2019

This role required me to work across development, promotions and teaching.

- Designed and developed a website for workshop bookings and delivered training sessions on Python programming.
- Mentored interns in building web tools for internal use and became an **Arctic Code Vault Contributor on GitHub.**
- Implemented strategies to spread awareness about open source tools in colleges across India, part of organization team of **Scipy-2019** event at **IIT-B campus.**

Education

National College of Ireland — Dublin, Ireland

Master's Degree in Data Analytics 09/2019 - 02/2021

Mumbai University — Mumbai, India

Bachelor's Degree in Computer Engineering 08/2013 - 06/2017

Thakur Polytechnic — Mumbai, India

Diploma in Computer Engineering 08/2010 - 05/2013

PAPERS PUBLISHED

NCI Project – Chest X-Ray COVID-19 Classification — Implemented an ensemble of deep convolutional neural networks to classify chest X-ray images into **COVID-19**, **pneumonia**, and **normal** categories. Leveraged transfer learning (e.g. AlexNet, ResNet variants) combined via hard and soft voting ensembles to improve generalization and accuracy on imbalanced datasets. Preprocessed data with normalization, histogram equalization, and augmentation; used cross-validation strategies to optimize performance. Achieved classification accuracy exceeding 85-90% with balanced precision-recall across classes. Built the solution using Python, TensorFlow/PyTorch, and followed modular design with unit testing and Git version control.

PAPERS PUBLISHED

Data Analysis, Visualization Product. — Co-authored research published in *GRD Journal for Engineering* (Vol.1, Issue 5, May 2016), focused on building a cross-platform data tool for end-to-end analytics. Designed and implemented modules for data acquisition, cleaning, transformation, visualization, and predictive modeling. Delivered an interactive dashboard that enabled trend forecasting and business insights across various domains. The solution supported structured and unstructured datasets via data mining and serialization practices, emphasizing scalability and decision-support through visualization and model-based forecasting.

Projects

WhatsApp Fact CheckerBot 05/2025

Developed an AI-powered WhatsApp bot to detect and debunk misinformation using Claude and Perplexity APIs for real-time LLM responses. Integrated WhatsApp Business API with webhook handling and MAKE automation for workflow orchestration. Built in Python with Git version control and unit testing to ensure reliability and modularity across fact-check pipelines.

- Helped raise quality of information and stop distrust among people in local communities.

Baby Monitoring Camera Detector 09/2020

Developed a Python-based safety monitoring system using object detection to detect infants moving outside the crib or other unsafe activities. Built with OpenCV and a TensorFlow/PyTorch model, it triggers real-time alerts when abnormal movement occurs (e.g. baby leaving crib), storing metadata for post-sleep analysis. Integrated ultrasonic sensor fallback logic for improved detection accuracy. Designed with modular architecture, Git version control, and unit tests for maintainability and reliability.

Enigma – Cipher Simulator with GUI 10/2015

Engineered a **Python-based digital twin of the WWII Enigma machine**, simulating rotor, plugboard, and reflector logic to encrypt and decrypt messages. Built using **Tkinter GUI**, modular key validation, and command-line interfaces. Designed for usability and educational value with versioned enhancements (key validation, file support). Covered full development lifecycle in Python using **Git version control** and incorporated **unit testing basics** for reliability.

SSearch – Enhanced Multi-engine Search Chrome Extension 12/2016

Designed and implemented a browser extension in JavaScript/HTML/CSS that enables multi-engine web search simultaneously. Users select their preferred search engines and a single query triggers individual tabs automatically—streamlining search experience across platforms. Built with modular front-end logic, GPL-3.0 licensing, and responsive UI behaviors based on selection patterns

EyeCare - Google Chrome Extension Date period

is a Chrome extension based on the 20-20-20 rule that helps reduce digital eye strain. It reminds users every 20 minutes to look 20 feet away for 20 seconds, encouraging healthy screen habits.

Skills

Data Analysis and Interpretation · AI tools, Prompt Engineering · Critical Thinking and Problem Solving · Python · Linux · Git · CI/CD · Public Speaking and Presentation · Ethics and Value Alignment · Entrepreneurial Mindset · Product Ownership · Data Cleaning and Preprocessing · Product Management · LLM · Vibe coding · Release Management · OpenAI · Claude and Perplexity APIs · Prompt Engineering · ETL pipelines · AWS Solutions Architect · MAKE Automation · Agentic AI Workflows · Webhooks & API Integration

Industry Expertise

Product Owner and TechLead

Vibe coding, Python programming

Cloud Infrastructure Management

Prompt engineering and MCP

AL Automation pipelines

Data Visualisation and Analysis

Interests

Reading Books and classical music

Philosophy, hiking and horse riding

Video Games and documentaries

Football, badminton