KANISHKA WAGHMARE

Data Scientist | Neuroscientist

SUMMARY

Data Scientist and Neuroscientist with 8+ years of experience in research, machine learning, and statistical modeling. I specialize in translating complex, unstructured data into clear, actionable insights. Skilled in Python, end-to-end ML workflows, and communicating results effectively to diverse stakeholders. Passionate about the evolving role of generative AI and intelligent automation in driving smarter, faster decision-making. I thrive in collaborative environments and aim to build data-driven solutions that create meaningful impact across industries.

PROJECTS

Smart EDAtool – Automated Exploratory Data Analysis

₩ 04/2025

- Ø github.com/kanishkatks/Smart-EDAtool
- Built an agentic LLM-based system using LangGraph to automate EDA on CSV/JSON files, reducing manual effort by 80%.
- Deployed via AWS to deliver structured summaries, visualizations, and reports, with modular agents designed for future AI-driven automation.

AnomGuard - Credit Card Fraud Detection

苗 03/2025 🛛 🝳 Amsterdam

- ∂ github.com/MohsseniMahdi/anomguard
- Led a team to develop and deploy a credit card fraud detection system using supervised learning, achieving a 92% recall rate.
- Designed and implemented a full ML pipeline, from data preprocessing to model deployment, with cloud integration and a frontend for sandbox fraud detection.

Kanbot: RAG-Powered Chatbot for Portfolio

- ∂ github.com/kanishkatks/kanbot
- Developed a conversational assistant using Retrieval-Augmented Generation to answer portfolio-related queries with content sourced from CV, GitHub, and website.
- Combined LangChain for retrieval logic and Hugging Face inference APIs to deliver relevant, context-aware responses.

EXPERIENCE

PhD Researcher

Netherlands Institute for Neuroscience, KNAW, Amsterdam

🗰 07/2017 - 11/2023 🛛 🛛 Amsterdam, Netherlands

- Discovered two previously unidentified brain regions involved in spatial attention, mapping their network architecture in primates.
- Investigated multitasking limits by quantifying information bottlenecks (~35ms) through high-resolution temporal analysis.
- Led analysis of large-scale time-series electrophysiology and fMRI datasets using Python and MATLAB for advanced statistical modeling.
- Contributed to two forthcoming high-impact publications and collaborated on the development of a visual prosthesis.

Research Assistant

Dept. of Systems Neuroscience, University of Göttingen, Göttingen

🗰 08/2016 - 07/2017 🛛 🛛 Göttingen, Germany

- Reduced study duration by ~66% by designing new behavioral experiment to understand visual development in the mice brain.
- Improved analysis throughput by 8x through a custom algorithm for Spike Sorting and pipeline optimization.
- Presented research at two national conferences, boosting lab visibility and fostering international collaboration.
- Supervised and mentored two bachelor's theses, supporting junior researchers and reinforcing lab capacity.



Python, SQL, R, MATLAB, SPSS

Tableau, Power BI, SparkSQL

Scikit-learn, TensorFlow, Keras, PyTorch

Google Cloud Platform, AWS, Hadoop

Airflow, MLFlow, Prefect, Hadoop, Kubernetes

Git, Docker, Streamlit, FastAPI

CERTIFICATIONS

Google Business Intelligence Certificate Coursera

IBM AI Engineering Certificate

Coursera

Google Data Analytics Professional Certificate

Coursera

EDUCATION

Data Science and AI Bootcamp

Le Wagon Amsterdam

PhD in Neuroscience

Vrije Universiteit Amsterdam, NIN, Netherlands

MSc in Neuroscience

International Max Planck Research School, Univeristy of Göttingen, Germany

AWARDS



Indian Academy of Sciences Summer Fellowship 2013

Best Human Practices Award at iGEM-2013

LANGUAGES

English	Native
Hindi	Native
Dutch	Advanced

