

Aranya Bandhu

AI Engineer | Agentic Systems | AI Harness Engineering

Bengaluru, India (Open to Relocation) | aranyabandhu2004@gmail.com | linkedin.com/in/aranyabandhu |
github.com/BeaconBandhu | bashin.live

SUMMARY

AI Engineer specializing in agentic LLM systems, multi-agent orchestration, AI harness engineering, and production-grade inference under strict latency and reliability constraints. Project Contributor at Claude Code Central London. Shipped autonomous agents with deterministic state-machine control, hallucination suppression, and context verification (Gate-Lock architecture). Production experience in defense-grade regulated environments. 4 research papers, 3 patents drafted, INR 15 Lakh Ministry of Defence grant.

TECHNICAL SKILLS

AI / LLM	LLMs, RAG Pipelines, Multi-Agent Orchestration, Tool/Function Calling, Prompt Engineering, LLM Hallucination Suppression, AI Harness Engineering, Agentic Pipelines, Context Engineering (Gate-Lock)
ML / DL	PyTorch, TensorFlow, Keras, HuggingFace, CNNs, XGBoost, SVR, Scikit-learn, EEG/ECG Signal Processing, Computer Vision
Infra & Tools	Python, SQL, Bash, Docker, Flask, REST APIs, CI/CD (GitHub Actions), Git, Linux, n8n, AWS (EC2, S3)
Data	Vector DBs (Pinecone, FAISS), MySQL, MongoDB, Screen Vision (OCR/Layout Analysis)

WORK EXPERIENCE

Founder & AI Engineer | BashIn (bashin.live)

May 2026 – Present

- Shipped **BashIn**, an autonomous computer-use agent combining screen vision, speech recognition, and live LLM inference with a deterministic 4-mode state machine (listening, processing, speaking, guiding), eliminating race conditions in autonomous execution.
- Engineered hallucination suppression at the harness level by grounding inference in real-time screen context, reducing false actions 90%+. Built RAG pipeline with live screen state as retrieval context for multi-step task planning.
- Invented **Gate-Lock** context checkpoint architecture compressing verified state every 5 turns, reconstructing via NLP overlay. Token overhead reduced 60%+; sessions stable past 200+ turns. Sub-2s latency, zero cloud.

ML & LLM Developer | Araxys Aerospace

Jan 2024 – Present

- Designed CNN inference pipelines under strict latency (50ms), reliability, and explainability constraints for the Samridh fighter pilot helmet system across 3 Ministry of Defence funded projects.
- Deployed quantized models (TensorFlow Lite, INT8) to embedded hardware; built LLM-driven automation pipelines for compliance reporting. Co-authored 3 papers, 1 patent; supported INR 15 Lakh MSME 4.0 grant acquisition.

AI Product Engineer & Technical Interviewer | Newton School of Technology

Jun 2025 – Aug 2025

- Evaluated 50+ technical candidates using standardized AI/ML assessment frameworks; Built pipelines and AI and Browser agents in the exam panel. Contributed to hiring pipelines supporting 20 Cr EBITDA growth.

India Representative | Eikolos, Israel

Jan 2025 – Aug 2025

- Coordinated India-Israel DRISHTI defense innovation initiatives across international stakeholders.

KEY PROJECTS

NeuroSystem | github.com/BeaconBandhu/NeuroSystem

- EEG-based AI translating neural signals into real-time target acquisition at sub-50ms latency. Multi-stage cross-validation; kernel-level Gate-Lock verification. **1st Prize AI Cohort 2025**; Rs. 50,000 funded; paper published; patent filed.

Samridh | AI Fighter Pilot Helmet (Link withheld defense confidentiality)

- 360° situational awareness AI with real-time decision support under defense-grade constraints. 3 papers, 1 patent; INR 15 Lakh MSME Ministry of Defence grant.

BharatFarms | github.com/BeaconBandhu/Bharat-Farms

- Satellite + CNN/XGBoost/SVR crop intelligence for yield prediction and disease detection via REST API. **3rd Prize SRISHTI Innovation Challenge**; paper published; utility patent drafted.

RESEARCH & PATENTS

4 papers published: Samridh (defense situational awareness), H3-D3-Py (3D hexagonal path planning for autonomous systems), NeuroSystem (neural signal-to-action), BharatFarms (satellite crop AI). **3 patents drafted** across Samridh, NeuroSystem, BharatFarms.

EDUCATION & COMMUNITY

B.E. Computer Science AI & Data Science, CMR Institute of Technology, Bengaluru

CGPA: 8.02/10

Claude Code Community Central London | Tech Team, Hacker House Goa 2026 | Council Member, IIC | Associate Member, SIDM

RECOGNITION

Winner MSME 4.0 Idea Hackathon, MoD (INR 15L, 2024) | 1st AI Cohort 2025 | 3rd SRISHTI | Finalist Manthan, APF, Vishwakarma 2025 | Selected Bharat Innovates 2026