

Sayan Mondal

Solution Architect with 5+ years of enterprise technology experience spanning ServiceNow, Agentic AI, SaaS transformation, application architecture, and AI/ML delivery. PhD researcher focused on causal cyber defense, trustworthy threat detection, and security knowledge graphs.

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Google Scholar

PROFESSIONAL EXPERIENCE

Solution Architect

Mar 2025 — Present

Humanize Business Solution Pvt Ltd · Bengaluru, India

- Design solution architectures and agent workflows for enterprise discovery, documentation, specification, configuration, code generation, validation, and testing.
- Translate ServiceNow and SaaS transformation use cases into orchestrated workflows across Discover, Developer, and Decision agent capabilities.
- Define integrations with ITSM platforms, source repositories, version-control systems, and test-automation tools for near-touchless delivery.
- Apply RAG-based enterprise knowledge, AI guardrails, security controls, explainability, and traceability from discovery to production.

Software Engineer

Nov 2020 — Feb 2025

Virtusa · Hyderabad, India

- Developed and supported internal R&D applications using Python, ServiceNow, and AI/ML technologies.
- Managed ServiceNow instances and contributed to RFP solution design across the company portfolio.
- Designed application architectures and supported delivery from requirements through implementation and deployment.
- Provided technical training and mentoring and deployed AI/ML capabilities within enterprise workflows.

EDUCATION

PhD, Computer Science & Engineering

2025 — 2029

IIIT Guwahati · BRAIN Lab

Causal cyber defense, active inference, security knowledge graphs, trustworthy threat detection.

M.Tech, Software Engineering

2022 — 2024

BITS Pilani

B.Tech, Computer Science & Engineering

2016 — 2020

Techno India

CORE EXPERTISE

Solution Architecture

ServiceNow

Agentic AI

Generative AI

Machine Learning

RAG

AI Guardrails

Cybersecurity

Enterprise Integrations

Python

Technical Strategy

Mentoring

CERTIFICATIONS

- ServiceNow Certified Application Developer
- ServiceNow Certified System Administrator
- Partner Pre-Sales Specialization: Now Platform
- Ethics in the Age of Generative AI

SELECTED PUBLICATIONS

- 2026 **CAIRN: Causal Active Inference for Real-Time Cyber Attack Diagnosis and Response**
ACM AsiaCCS '26 · DOI: 10.1145/3779208.3804893
- 2026 **EntroURL-Bench: A Feature-Rich Benchmark Dataset for Trustworthy Malicious URL Detection**
ISEC 2026 · Research Papers Track
- 2020 **Global Positioning System Based Automated Railway Level Crossing**
ICCECE 2020

Five publications in total. Full list: sayanmondal2098.github.io/papers.html