SOUVIK NANDI

Senior Software Engineer | AI & Automation Enthusiast | Azure & .NET Expert

📍 India   📞 +91 9831151765   📞 +91 8617790074   🔗 souviknandi.com   in linkedin.com/in/souvik-nandi
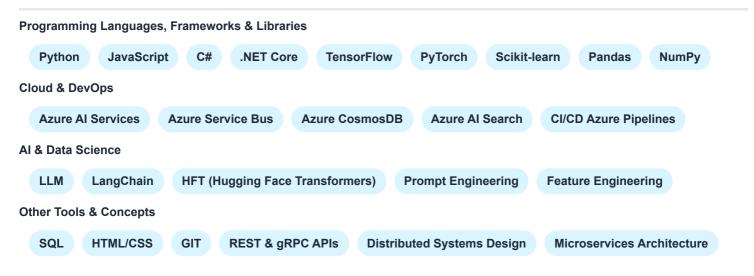
👤 Summary

Results-driven Senior Software Engineer with 7+ years of experience building scalable backend systems and enterprise-grade applications. Currently at Microsoft, driving cloud-native solutions and AI-powered innovations. Specialized in: `Azure` `.NET (C#)` `Python` `Azure AI Services` `LLM Integration` `Prompt Engineering` Proven track record in leading complex projects, improving performance, and resolving production issues. Designed intelligent backend workflows integrating LLMs for document analysis, recommendation engines, and AI-based process optimization.

🛠 Skills

Programming Languages, Frameworks & Libraries

`Python` `JavaScript` `C#` `.NET Core` `TensorFlow` `PyTorch` `Scikit-learn` `Pandas` `NumPy`

Cloud & DevOps

`Azure AI Services` `Azure Service Bus` `Azure CosmosDB` `Azure AI Search` `CI/CD Azure Pipelines`

AI & Data Science

`LLM` `LangChain` `HFT (Hugging Face Transformers)` `Prompt Engineering` `Feature Engineering`

Other Tools & Concepts

`SQL` `HTML/CSS` `GIT` `REST & gRPC APIs` `Distributed Systems Design` `Microservices Architecture`

📈 Experience

Microsoft
Software Engineer 2   Dec 2022 – Present | Hyderabad, India

- Architected and led the **Azure Event Management platform**, enabling intelligent auto-healing and self-diagnostic capabilities using AI-based log and telemetry anomaly detection.

- Developed a **Smart Subscription system** integrating Azure AI Search and OpenAI, achieving automated event correlation and reducing triage time by **60%**.

- Built an internal AI assistant using Azure OpenAI and Teams transcripts, improving engineering onboarding and support productivity by **40%**.

- Led architectural design for privacy-resilient distributed systems using **C#, .NET, and Cosmos DB**, integrating ML-based throttling for high-load services.

- Implemented a secure dynamic execution engine for customer-submitted code in isolated environments with Azure ML model selection for runtime decision-making.

- Proficient in threat modeling, performance tuning, and seamless integration of **AI pipelines in cloud-native architectures**.

Microsoft
Software Engineer

Dec 2021 – Nov 2022 | Hyderabad, India

- Designed and developed the core **Azure Event Management platform** to support mission-critical app resiliency and intelligent escalation workflows.
- Introduced AI-enhanced case routing using text classification and similarity models, improving case assignment accuracy.
- Worked on event-driven architecture and integrated early anomaly detection using **Python and Azure ML** to preemptively flag outages.

Soroco
Senior Software Engineer

Feb 2021 – Nov 2021 | Bangalore, India

- Led development for **Scout Enterprise**, driving improvements in task mining, user behavior modeling, and interactive UI visualizations.
- Architected critical components for Scout's real-time data ingestion and rendering pipeline, improving latency and throughput by **35%**.
- Mentored junior engineers, reviewed architecture proposals, and contributed to technical design discussions across teams.

Soroco
Software Engineer

Aug 2019 – Jan 2021 | Bangalore, India

- Built and maintained core APIs and workflow logic for **Process Designer**, enabling scalable process automation across enterprises.
- Integrated data visualizations and flow-based tools to allow business users to configure and simulate workflows with ease.
- Worked closely with product and QA teams to launch stable feature rollouts and conduct regression testing.

Kreeti Technologies Pvt. Ltd.
Web Engineer

Nov 2017 – Aug 2019 | Kolkata, India

- Migrated legacy systems and optimized complex database queries for **Clockwork Recruiting**, improving performance and data integrity.
- Developed **Smart Gardener** from scratch—a dynamic crop recommendation tool with Stripe payment integration and responsive frontend.
- Scaled Faburica's cloud infrastructure using load balancers, autoscaling, and the **ELK stack** for log analytics and monitoring.

Indian Institute of Technology, Guwahati
Research Intern

Jan 2016 – Feb 2016 | Guwahati Area, India

- Pioneered research at the **User Centric Computing & Networking Lab**, leading to a methodology that reshaped user experience design.
- Developed **A Linear Algebraic Approach to Determine a Common Ordered Scan Path**, an algorithm that increased eye-tracking accuracy by **80%**, now adopted in IITG for VR technologies development.
- Architected an innovative annotation feature for an ICT-based **E-Learning System**, boosting student engagement.
- Conducted high-stakes server load testing for an ICT-based **E-Learning System**, ensuring flawless performance under extreme conditions and enabling the platform to support over 1 million concurrent users during online education surges.

Kalyani Government Engineering College
Coordinator Cryptix 2017, Espektro (Part-time)

Mar 2017 | West Bengal, India

- Masterminded the **CRYPTIX 2017** event during **ESPEKTRO 2017** (technical fest of KGEC), transforming it into the WBUTs largest online cryptography challenge, attracting over **1000+** participants from **50+** colleges.

Kalyani Government Engineering College
Web Developer, Espektro 2017 (Part-time)

Jan 2017 – Feb 2017 | West Bengal, India

- Revolutionized the digital presence of **ESPEKTRO 2017** (technical fest of KGEC) by designing a 3D animated and interactive website using **three.js** and advanced web technologies, driving a **200% increase** in event registrations.

🎓 Education

Kalyani Government Engineering College
B.Tech, Computer Science & Engineering
CGPA: 8.3/10

2013 – 2017

- Conducted multiple tech events, including organizing workshops and competitions during **ESPEKTRO 2017**.
- Founded the **Robotics Club**, fostering innovation and hands-on learning in robotics and automation among students.
- Finalist in the **Smart India Hackathon 2017**, working on a project analyzing climate changes based on migratory bird data, contributing to environmental research.

Hariyana Vidya Mandir
Science, AISSCE
Percentage: 92.5%

2012 – 2013

- Excelled in the AISSCE Science stream, securing **92.5%**.
- Awarded the **Merit Scholarship** for academic performance and leadership in science exhibitions.

🔀 Projects

Leetcode Extractor
📅 Apr 2025

- Developed a tool to extract data from Leetcode, enabling users without premium access to search, filter, and sort problems by companies and other parameters, and access editorials.
- 🔗 **Link:** simpleandsmart.org

Linear Algebraic Approach for Eye Gaze Scan Path
📅 Jan 2016 – Feb 2016

- Researched and developed a method to determine a common ordered scan path from eye gaze data of multiple users.
- </> **Technologies Used:** `Linear Programming`
- **Associated with:** Indian Institute of Technology, Guwahati

Automated Scoring Application for Student Essays
📅 Dec 2016 – May 2017

- Designed an application to automatically score student essays and short answers using NLP techniques.
- **</> Technologies Used:** `Python` `NLTK`

Video Categorization for Scene Change Detection
📅 Dec 2015 – Apr 2017

- Built a system to categorize videos by detecting scene changes and identifying characters in movies.
- **</> Technologies Used:** `MATLAB` `XILINX` `ModelSim`
- **Associated with:** Kalyani Government Engineering College

Object Identification Using Canny Edge Detection
📅 Dec 2016 – Apr 2017

- Developed a system to identify objects in images using the Canny Edge Detection algorithm.
- **</> Technologies Used:** `MATLAB`
- **Associated with:** Kalyani Government Engineering College

A Bar Charts Application
📅 Oct 2017

- Developed a web application to create and visualize bar charts with interactive features.
- **</> Technologies Used:** `ReactJS` `HTML5` `Bootstrap3`
- **🔗 GitHub:** github.com/souviknandi24/bar-charts

An Event Task Management Webapp
📅 Sep 2017

- Built a web application to manage tasks and schedules for events, improving team coordination.
- **</> Technologies Used:** `Ruby on Rails` `MySQL` `HTML5` `Bootstrap3`
- **🔗 GitHub:** github.com/souviknandi24/eventask

Online Job Portal
📅 Apr 2017

- Created a platform for job seekers to search and filter relevant job postings efficiently.
- **</> Technologies Used:** `PHP` `MySQL` `HTML5` `CSS3` `Bootstrap3` `JavaScript`

✳ Certifications

Microsoft Azure AI Fundamentals
📅 Apr 2025

🏢 Microsoft

- ✅ AI Overview — 8ZA5U3DW
- ✅ Computer Vision — 9YFJ72ZU
- ✅ Document Intelligence and Knowledge Mining — YEMN3K3R
- ✅ Generative AI — 8ZA3XNUW
- ✅ Natural Language Processing — 9YFJ72ZU

Microsoft Security Certifications
📅 Apr 2025

🏢 Microsoft

- ✅ Enhance Security Operations using Microsoft Security Copilot — 4G5Q4Z4K
- ✅ SC-200: Mitigate Threats using Microsoft Security Copilot — XQVWX3RY

Cloud Security Challenge
📅 Jan 2022

🏢 Google Cloud Skills Boost

- ✅ Bonus
- ✅ Level 1
- ✅ Level 2
- ✅ Level 3

Programming Skills
📅 Jun–Jul 2020

🏢 HackerRank

- ✅ JavaScript (Basic) — de26feb88556
- ✅ Python (Basic) — 6da868c90c7f
- ✅ Angular (Basic) — 317e14383218
- ✅ Problem Solving (Basic) — 806f322b2f00

Data Science Specialization
📅 Mar 2019

🏢 Coursera

- ✅ Data Science Orientation
- ✅ The Data Scientist's Toolbox
- ✅ What is Data Science? (IBM)

Web Development
📅 Jun–Jul 2017

🏢 Udemy

- ✅ Bootstrap 4 Rapid Web Development — UC-CHHPBZEO
- ✅ JavaScript for Web Development Beginners — UC-0K6N4E62

Programming in C
📅 Dec 2014

🏢 NPTEL

- ✅ Introduction to Programming in C

🔤 Languages

- 🌐 **English** — Fluent
- 🌐 **Hindi** — Fluent
- 🌐 **Bengali** — Proficient