Souhardo Rahman.

AI & DevOps Team Lead, Medical-AI Researcher

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SUMMARY

Over 3 years of experience building AI products and software. Team lead for AI & DevOps at Ledgercross, leading a team of 6 that delivered four production AI products, and co-founder of a student research lab that has produced 24 publications, 12 of which I co-authored. My goal is to grow into a leadership role.

EXPERIENCE

Ledgercross — AI agents for business operations & trust

Software Developer, Team Lead — Sep 2026 – Present
Software Developer, AI & DevOps — Mar 2026 – Aug 2026
Software Developer Intern, Full-stack & Blockchain — Feb 2026 – Mar 2026

- Led a team of **6** to deliver **4 production projects**, owning deadlines, code quality and team training.
- Own CI/CD, cloud infrastructure and release gates across 4 products, which shipped **800+ merged PRs** in two months with **~4,400 automated tests** and a median under **15 min** from PR to merge.

Arché Intelligence Lab — Non-profit, student-led AI research

Co-founder & Operations Director — May 2024 – Present
Supervisor, Computer Vision & Medical-AI — Oct 2025 – Present

- Run lab operations and supervise student teams in computer vision and medical AI.
- Built research collaborations with international partners; grew lab output to **24 publications** (12 co-authored by me).
- Mentor students from first idea to published paper.

PROJECTS

Veritas Global KYC & Identity Verification — Python / FastAPI / InsightFace / GCP / Terraform

Rebuilt a KYC-as-a-service platform on serverless, scale-to-zero GCP: Google OCR document extraction, InsightFace ID-to-selfie face match with liveness and splice detection, signed webhooks and an operator dashboard. Designed to return decisions in under 30 seconds at a target of $0.10–0.40 per check, against $5–15 for legacy providers.

ODIN Real-Time Deepfake Detection odinfinds.com — Python / FastAPI / Pub/Sub / Cloud Run

Single-handedly built a Chrome/Edge/Firefox extension that flags synthetic media on YouTube, TikTok and X in real time, backed by a FastAPI orchestrator, a Vertex AI analysis agent and Stripe billing. Now preparing for production launch.

APRON AI Procurement Negotiator — Python / TypeScript / React / PostgreSQL / Docker

Built a procurement execution system where AI extracts supplier quotes and drafts negotiations, deterministic code verifies terms, policy decides and humans approve high-impact actions. In a 4-quote RFQ benchmark it found a supplier 9.6% cheaper on landed cost, and it is rate-limited to handle 3,000 requests/min per tenant.

ACROA Contract Risk & Obligation Agent — FastAPI / Next.js / Vertex AI / PostgreSQL / Celery

Shipped a multi-tenant contract intelligence platform that ingests contracts from Google Drive, tracks obligations and renewal deadlines, and drafts notice letters behind human-approval gates. On a 4-contract test portfolio it flagged $191K at risk, including a $184K auto-renewal caught 9 days before its notice deadline.

Keptcash AI Accounts-Receivable Agent — FastAPI / Next.js / QuickBooks / Nylas / Playwright

Built an AI accounts-receivable employee that syncs QuickBooks and email, diagnoses with evidence why each overdue invoice is unpaid, and drafts collection emails behind a human-send gate and a live fact guard. In the spec walkthrough it diagnosed a $74.5K invoice 42 days overdue, and new overdue cases surface within 10 minutes.

WifiRank Crowdsourced ISP Rankings wifirank.site — Astro / React / Neon Postgres / MapLibre

Launched a crowdsourced speed-test platform for Dhaka ISPs that runs browser tests against Cloudflare's Dhaka edge on a live map and ranks 147 providers per neighbourhood.

EDUCATION

American International University-Bangladesh (AIUB), Dhaka Sep 2022 – May 2026
B.Sc. in Computer Science & Engineering, CGPA **4.00**/4.00

BAF Shaheen College Dhaka, Dhaka Jun 2019 – Dec 2021
HSC (Science), GPA **5.00**/5.00

RESEARCH (AI, Neuroimaging, ML/DL, Healthcare)

JOURNAL ARTICLES

- **Hi-TGNet**: Hierarchical Tumor Guidance Network for Explainable Brain Tumor Classification — Scientific Reports, Nature †[1]
- **OpthaNet**: Attention-Integrated Architecture for High-Precision Multi-Class Ophthalmic Image Classification — HTL, Wiley †[1]
- **T3SSLNet**: Triple-Method Self-Supervised Learning for Enhanced Brain Tumor Classification in MRI — IEEE Access †[2]
- **KbFL-XAI**: Explainable Knowledge-Based Federated Learning for Eye Disease Diagnosis — BEA, Elsevier †[4]

CONFERENCE PROCEEDINGS

- **BUSegNet**: A Speckle-Aware Multi-Scale CNN with Noise Modeling and Gated Calibration for Breast Ultrasound Diagnosis — ICCIT 2025 †[1]
- **MIME**: Imbalance Mitigation Engine for Skin Cancer Classification — TCCE 2025, Malaysia †[2]
- **SSChNet**: Self-Supervised Pre-trained Network for Child Speech Recognition — NCIM 2025 †[2]
- **VARENet**: Variance-Aware Residual Enhancement Network for Microscopic Fungal Classification — BECITHCON 2025 †[2]
- **VisionOcular**: Transfer Learning with Self-Attention for Multi-Class Ocular Diagnosis — QPAIN 2025 †[2]
- Towards Decentralized Brain Tumor Classification using Federated Learning with Explainable AI — ICCIT 2025 †[3]

UNDER REVIEW

- **HybridMAE-Net**: Lightweight Skin Lesion Classification with MAE-Inspired Auxiliary Masked Reconstruction — IEEE Access †[2]
- **AMCS**: Adaptive Multi-Stage Threat Containment System for Ransomware via Closed-Loop Kernel Control — JSA, Elsevier †[4]

DATASET

- **Brain MRI ND-5**: Curated brain MRI collection for multi-class tumor classification — IEEE DataPort †[2]

† Number shows my author position (†[1] = first author).

SKILLS

Languages	Python, TypeScript, JavaScript, Go, Kotlin, SQL
Web	React, Next.js, Astro, TanStack, FastAPI, TailwindCSS
Cloud & DevOps	GCP (Cloud Run, Pub/Sub), AWS, Terraform, Docker, CI/CD, Dokploy on VPS
AI & Data	PyTorch, InsightFace, Vertex AI, NumPy, Pandas, Matplotlib, Seaborn, Plotly
Research Areas	Medical-AI, Computer Vision, Self-Supervised & Transfer Learning, Federated Learning, XAI
Spoken	English (C2), Bengali (native), Spanish (A1)

HONORS & EXTRACURRICULAR ACTIVITIES

- **Academic Scholarship** — 90% merit scholarship at AIUB.
- **Dean's List** — 5 consecutive academic terms.
- **IEEE AIUB Student Branch** — General member; professional development and networking events.
- **AIUB Social Welfare Club** — National Ideas Challenge, Winter Clothing Drive and flood rescue initiatives.