Deepanshu Yadav

+91-93512-73050 | dydipanshu2004@gmail.com | Noida, India
dydipanshu.online | linkedin.com/in/dydipanshu | github.com/dydipanshu

Experience

Full-Stack Developer (Freelance) Apr 2026 – Jun 2026
2020Tax.ie, Irish tax-filing startup (since closed) *Remote*

- Built the tax-filing front end in **Next.js, TypeScript and Redux**: a long multi-step form where later questions depend on earlier answers, with field-level validation so people with no tax background could file alone.
- Turned tax-claim rules into **FastAPI** data models and kept the REST contract in sync with the client.
- Traced slow page loads to a proxy layer that added nothing and removed it, speeding up every request.

Web Developer Intern Jun 2025 – Jul 2025
SB Technosoft *Bharatpur, India*

- Sole developer on a client website: gathered requirements, ran client review rounds and shipped on schedule.

Projects

USGScribe | *TypeScript, React, Electron, Node.js, Whisper, Claude API* | usgscribe.tunedloop.com 2026

- Voice dictation for ultrasound reports, live in production: an **Electron** tray app types into MS Word and restores the user's clipboard, and a web editor adds templates, printing and .docx export.
- Audio is cut at natural pauses and sent to **Whisper** through a serverless API with a per-IP rate limit; queued segments are merged into one request to stay inside the 2,000 requests/day free tier.
- Wrote a unit-tested TypeScript core shared by both apps that turns speech into report text: spoken measurements ("10.2 by 4.5 centimetres" to 10.2 x 4.5 cm), voice commands and phrase macros.
- Added AI report structuring with **Claude** tool use; a deterministic checker reverts any line containing a number the doctor never said, and nothing changes until the doctor approves.

Support Triage Agent | *Python, OpenAI API, Embeddings, pandas, scikit-learn* | GitHub 2026

- Agent that classifies airline support messages into 9 intents, drafts replies grounded in **23,000+** past threads via embedding retrieval, and routes each to auto-reply or a human with a named reason.
- Fixed rules for money, personal data, legal, medical and hostile messages that the model cannot override: **94% escalation recall** and 3 unsafe auto-replies out of 51, against 34 for a TF-IDF and keyword baseline.
- Built the evaluation: a 220-example hand-labelled golden set, two baselines, and an LLM judge checked against blind human scores (Spearman 0.72); cached model calls make every number reproducible in CI.

AKTU Answer Copy | *Next.js, TypeScript, pdf-lib, Vercel* | aktucopy.vercel.app 2025

- The university portal shows checked answer sheets but has no download; this app logs in on the server, handles the portal's sessions and hidden form fields, and returns one PDF, cutting **20 minutes to 1** per subject.
- Used by **30+** students; reads the portal's options at runtime so renames do not break it, and shows page-level progress and short error IDs for support.

AKTU Records Pipeline | *TypeScript, Node.js, Cheerio, MongoDB* 2024

- Replaced days of manual copying for college administration: pulled **1,000+** student records from the portal into a database and spreadsheet in one unattended run, detecting dropped sessions and retrying.

Research

Co-author, MPCON 2026 | *Deep Learning Architectures for Fault Detection in Power Grids* 2026

- Peer-reviewed comparison of CNN, ViT and Swin Transformer models; led the experiments and PyTorch code.

Technical Skills

Languages: TypeScript, JavaScript, Python, SQL, C, C++
Backend: Node.js, FastAPI, REST APIs, PostgreSQL, MongoDB, serverless functions
Frontend: React, Next.js, Redux, Electron
AI: Claude API, OpenAI API, Whisper, embeddings and retrieval, LLM evaluation, PyTorch
Tools: Git, GitHub Actions, Linux, Vercel, Cloudflare Workers, Playwright, pytest

Achievements

Top 50 of 600+ teams, IIT Bombay e-Yantra | **Semi-finalist**, APNA Hackathon | **4-star C++**, HackerRank

Education

JSS Academy of Technical Education Noida, India
Bachelor of Technology in Electrical Engineering *2022 – 2026*