

JAYESH THAPA MAGAR

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EDUCATION

The University of Texas at Arlington

Expected Spring 2028

B.S. in Software Engineering

- Honors: UTA Maverick Academic Scholarship; Freshman Distinction Roll
- Relevant Coursework: Algorithms and Data Structures, Object-Oriented Programming, Intermediate Programming, Computer Organization and Assembly

TECHNICAL SKILLS

Languages: Python, Java, TypeScript, JavaScript, C

AI & Data Extraction: LLM-based structured data extraction, RAG pipelines (LlamaIndex), OCR & layout-aware extraction, JSON-schema-style parsing, Pandas, JSON/JSON-LD parsing, OpenCV, Pillow, document ingestion pipelines

Frameworks & APIs: NestJS, React, Node.js, Express.js, REST APIs

Databases & Backend: MongoDB, Mongoose, DTO/schema validation, JWT, bcrypt

Testing & Dev Tools: Jest, Postman, Git, GitHub, CI workflows, Docker (basic), Google Colab, VS Code

EXPERIENCE

Pfizer Advanced: AI-Powered Document Insights & Data Extraction — Extern

Jul 2026 – Present

Externship via Extern.

- Built Python data-extraction pipelines in Google Colab to process unstructured PDF documents, clean extracted text, and transform information into structured data for downstream applications.
- Parsed nested JSON data and transformed it into structured Pandas DataFrames with consistent fields and data types.
- Preprocessed noisy document images using OpenCV and Pillow and evaluated OCR approaches for extracting information from complex document layouts.
- Building a Retrieval-Augmented Generation (RAG) pipeline with LlamaIndex to retrieve relevant information from large document collections using LLM-based retrieval.

VetRanker — Backend Developer, Project Contributor

Dec 2025 – Present

- Developed article-management REST APIs with NestJS, TypeScript, MongoDB, and Mongoose, supporting CRUD operations, paginated retrieval, and schema-driven data validation.
- Implemented request/DTO validation, automatic route generation, structured error handling, and duplicate-record detection to improve API reliability and data consistency.
- Debugged frontend-backend payload and schema-mismatch issues, tested integrations with Postman, incorporated code-review feedback, and shipped changes through CI via GitHub pull requests

PROJECTS

Full-Stack Internship Tracker

2026

React, NestJS, MongoDB | Personal Project

- Built a full-stack application for creating, editing, deleting, and tracking internship applications using a React frontend, NestJS REST API, and MongoDB persistence.
- Diagnosed integration failures caused by inconsistent field names, schemas, and JSON payloads, then aligned the data contract end-to-end — hands-on experience reconciling mismatched source data against a target schema.

Doctor Appointment Booking Web Application

2025

React, NestJS, MongoDB | Personal Project

- Developed a responsive web application for managing appointment bookings and patient information using modular NestJS controllers, services, and database schemas.
- Implemented JWT authentication and bcrypt password hashing and connected the React frontend to REST API endpoints for account access and appointment scheduling.

LEADERSHIP & CERTIFICATIONS

- Rotaract Club of Dakshinkali — IT Chief, Nepal (2023 – Present)
- IBM Certifications: Developing Back-End Apps with Node.js and Express; JavaScript Programming Essentials; Node.js & MongoDB: Developing Back-end Database Applications