Dhruv Toshniwal www.dhruvtoshniwal.com +1-508-439-7794 dhruvt@bu.edu LinkedIn GitHub

AI Engineer and Founder working at the intersection of Finance, Legal Tech, and AI, with 3+ years of experience in back-end and distributed systems and a Master's from Boston University.

Education

Boston University, Graduate School of Arts and Sciences, Boston, MA

Master of Science in Computer Science.

Sept 2022 - Jan 2024

Maharashtra Institute of Technology, Pune, India

Bachelor of Technology in Computer Science and Engineering.

Aug 2017 - July 2021

Skills, Interests, and Co-curricular

- Programming Languages: Python, Java, Go, C++.
- Databases: PostgreSQL, NoSQL, Vector Databases, PL/SQL.
- AI/ML: Applied AI, Prompt Engineering, Fine-tuning, Embeddings, RAG, Knowledge Graphs, Model Evaluation, Model Deployment, CNNs, Transfer Learning.
- Systems & Cloud: Microservices Architecture, AWS (EKS, Bedrock), GCP, Kubernetes, Docker, CI/CD, REST APIs, Kafka.
- Tools & Frameworks: LangGraph, LangChain, FastAPI, TensorFlow, PyTorch, Git, Unit/Integration Testing.
- Certifications: Specializations in Deep Learning, Python, and Java.
- Publications: Google Scholar Profile (IEEE + NSF-funded work).
- Leadership: Ex-Joint Secretary, Rotaract Club of Nasik Youth Force, India (NGO).

Work Experience

Domify AI, Manhattan, New York

AI Engineer (Founding Team) January 2025-Current

First AI hire at a \$4M seed startup automating financial supervision and compliance.

- Developed AI-driven workflows to consolidate fragmented contract schemas (CSVs) and parse XML contract data with contextual integrity, enabling LLMs to generate structured narratives that reduced supervisory review time from 30 minutes to under 5 minutes.
- Engineered evaluation and AI infrastructure, including a delta-checker microservice to benchmark model outputs and an internal AI library standardizing LLM workflows, accelerating multi-model experimentation and design.
- Designed a B2C due diligence system for private market funds, building a framework to distill and organize industry-standard investor queries into topics, and applying RAG pipelines to extract **key insights and facts** from fund documents for investor decision-making.

River AI, Remote

Founder May 2025-Current

Building AI-powered legal tech platform to transform how law firms manage cases and analyze documents.

- Architected and deployed full-stack SaaS platform combining case management with AI document intelligence—enabling legal teams to chat with documents, generate case timelines, and automate contract analysais across **9 practice** areas.
- Developed 6 core AI capabilities including multi-language translation, document summarization, and legal research integration designed to streamline document review workflows and reduce manual analysis time.

C10 Labs, Cambridge, MA

Machine Learning Consultant June 2024 - Nov 2024

Advised portfolio companies at a \$77M venture fund supporting MIT and Harvard-affiliated AI startups.

- Designed a prototype AI system for a FinTech startup automating RFIs for cross-border payments, and evaluated technical feasibility of portfolio companies through regular benchmarks, stack reviews, and moat assessments.
- Built a voting and insights web-app used by partners, founders, and the CEO to evaluate 10+ startups per cohort, integrating LLM-based market data vs. pitch-deck analysis to increase decision confidence.
- Co-built internal prototypes during hackathons, including a compliance automation tool for vendor document checks, helping the fund experiment with in-house product innovation.

Naimer (Catchword Branding), Remote

AI Architect (Consultant) Sept 2024 - Nov 2024

- Consulted for Catchword Branding on their AI-powered naming platform, Naimer, fine-tuning OpenAI 40 and Gemini 1.5 models for brand name generation.
- Performed advanced prompt engineering and introduced orchestration agents to handle compound, non-English, and coined naming tasks, improving quality and diversity of generated names.

Boston University, Boston, MA

- Research Assistant Sept 2023 May 2024
- Led a remote sensing study on mangrove detection in Indonesia, independently developing CNN-based models that outperformed traditional pixel classification for geospatial image analysis.
- Built knowledge-graph—driven workflows for evaluating LLMs in K–12 education, designing expert-in-the-loop assessments of factual accuracy and depth; research funded by the National Science Foundation and culminated in a published paper.

Massachusetts Life Sciences Center, Boston, MA Software Engineering Intern May 2023 – Aug 2023

- Deployed a multi-document chatbot (LangChain + RAG) to customers, enabling unlimited query handling across diverse documents and improving support case resolution rates by 13%.
- Developed a cross-platform Java accessibility app integrating a braille tablet with Azure AI Vision, Google Vision, and Free-TTS, delivering real-time object recognition and audio feedback for visually impaired users.

Amdocs DVCI, Pune, India

- Software Engineering Associate Feb 2021 July 2022
- Improved ETL runtime efficiency by 90% while developing and customizing REST APIs in Java for Comcast's CRM team.
- Created automated testing scripts in SoapUI and contributed to database design and production conflict resolution as part of a large-scale dev team.

Projects

Video Recommendation System

Multi-University Collaboration, 2023

- Collaborated across Boston University, Tel Aviv University, Technion, and Bocconi University to build Python simulation of video recommendation systems using TF-IDF vectorization and cosine similarity algorithms.
- Implemented Responsible AI principles including fairness and transparency, coordinating technical integration across international teams.

Comprehensive Financial Trading Suite

Quantitative Finance Portfolio, 2023-2024

- Built suite of five interconnected trading strategies including LSTM-based stock price prediction models, genetic algorithm portfolio optimization, and AI-driven sentiment analysis using GPT-3 and Hugging Face Transformers.
- Integrated real-time data processing with Alpaca API and developed backtesting frameworks using Bollinger Bands and SMA crossover strategies for automated trading systems.