HAVISHEY JOTANIYA

New York, NY | (646) 538-5824 | havisheyjotaniya@gmail.com | LinkedIn | GitHub | Portfolio

EDUCATION

Stevens Institute of Technology **Sep 2024 - May 2026**

M.S., Computer Science *Hoboken, NJ*

- **Achievements:** Provost Master's Scholarship
- **Coursework:** Machine Learning, Deep Learning, NLP, Distributed Systems, Advanced Algorithms, Knowledge Discovery & Data Mining, Data Analytics, Database Systems

WORK EXPERIENCE

Stevens Institute of Technology

Stevens Marketplace *Hoboken, NJ* • **May 2026 - Present**

Stevens Marketplace is a platform that connects organizations, faculty, and students to collaborate on real-world projects. Organizations provide challenges and funding, faculty lead projects, and students discover opportunities that match their skills. The platform supports resume-based matching and AI-assisted interviews to help faculty review candidates.

- Developed backend services and APIs for a platform connecting organizations, faculty, and students with project opportunities.
- Helped build an LLM-powered interview assistant with adaptive questioning to assess candidates for projects.
- Designed Adaptive Knowledge Verification (AKV), a multi-stage process that probes candidates' understanding beyond their initial responses.
- Designed five interview guardrails covering dynamic question perturbation, cross-response consistency, practical competency validation, rubric-based evaluation, and adaptive reasoning verification to mitigate unauthorized AI-assisted responses.

SCREEN: News Media Stance Research *Hoboken, NJ* • **Jan 2026 - May 2026**

- Built an NLP data pipeline for analyzing news coverage of social media and youth mental health, creating a labeled dataset of 1,500+ articles for machine learning and statistical analysis.
- Designed an LLM-assisted filtering and annotation workflow using GPT-4o and GPT-4o-mini, and applied human-in-the-loop validation to improve dataset quality.
- Trained and evaluated Logistic Regression, SVM, RoBERTa, and Longformer models using scikit-learn and Hugging Face Transformers on AWS EC2; compared supervised models with zero-shot LLM approaches for four-class stance detection.

Teaching Assistant (Python, ML & Software Development) *Hoboken, NJ* • **Sep 2025 - May 2026**

- Supported graduate-level courses in Python, machine learning, data analysis, and software engineering, assisting 100+ students per course with data analysis, debugging, implementation, and technical problem-solving.
- Evaluated coding assignments and final projects involving Pandas, NumPy, preprocessing, sentiment analysis, Git/GitHub workflows, databases, testing, and object-oriented programming.
- Provided technical feedback on code quality, software design, model evaluation, documentation, and software engineering best practices.

PlusGold

Software Engineer Intern *Bangalore, India* • **Jan 2023 - Jun 2023**

- Developed scalable RESTful APIs using FastAPI integrated with MySQL and Redis for high-performance backend workflows.
- Implemented CI/CD pipelines using GitHub Actions and Jenkins and deployed cloud-based services on AWS (EC2, Lambda, CloudWatch).

Elsner Technologies

Software Engineer Intern *Ahmedabad, India* • **Jun 2022 - Jul 2022**

- Developed FastAPI backend services within a microservices architecture, improving API reliability and maintainability.
- Containerized applications using Docker and supported deployment workflows using Terraform.

PROJECTS

AI Knowledge Assistant (RAG System)

- Python, FAISS, FastAPI, Streamlit
- Built a Retrieval-Augmented Generation (RAG) system for semantic search and context-aware question answering across document datasets.
- Developed scalable embedding and vector-retrieval pipelines with FAISS to support low-latency document search.
- Designed FastAPI-based backend services integrating retrieval systems with LLM-powered workflows for real-time AI-assisted querying.
- Deployed an interactive Streamlit application for contextual search, document ingestion, and dynamic knowledge retrieval.

SKILLS

- **Languages**: Python, SQL, JavaScript, Java, R
- **Machine Learning & AI**: Scikit-learn, PyTorch, TensorFlow, Hugging Face Transformers, NLP, RAG, FAISS, BERT, DistilBERT, RoBERTa, Longformer, Pandas, NumPy
- **Frameworks & Backend**: FastAPI, Flask, React
- **Cloud & DevOps**: AWS (EC2, Lambda, S3, CloudWatch), Docker, Terraform, GitHub Actions, Jenkins
- **Databases**: MySQL, PostgreSQL, MongoDB, Redis, BigQuery