# Shantanu Shinde

Dallas, TX 75252 | shinde.shantanu21@gmail.com | Work Authorization: F-1 Visa
linkedin.com/in/shantanu-shinde123| github.com/ShantanuShinde | shantanu-shinde.vercel.app

## EDUCATION

**University of Texas at Dallas**, Richardson, TX, United States — Expected: May 2026
*Master of Science, Computer Science – Data Science Track* — **GPA 3.78**
**Indian Institute of Information Technology**, Nagpur, MH, India — June 2021
*Bachelor of Technology, Computer Science and Engineering* — **GPA 3.75**
Coursework: Database Design, Machine Learning, Statistical Methods for Data Science, Big Data Management and Analytics, Natural Language Processing, Design and Analysis of Algorithms, Neural Networks and Deep Learning

## TECHNICAL SKILLS

**Programming Languages**: C++, Python, C#, Java, Javascript
**Tools** & **Frameworks**: Lang Chain, Kubernetes, Apache Spark, .NET, Azure Dev Ops, pytorch, tensorflow, Unreal Engine, Unity3D, Springboot, git, gRPC, REACT, MySQL, MongoDB, AWS, Azure
**Certifications:** Deep Learning Specialization, Advanced Data Science Specialization, Reinforcement Learning Specialization

## WORK EXPERIENCE

**University of Texas at Dallas**, Richardson, TX, US — September 2024 – Present
*CS Outreach Instructor*

- Helping to conduct and act as instructor for coding workshops and events for school students.

**NI (National Instruments) (Emerson)**, Bangalore, India — January 2021 – June 2024
*Staff Software Engineer*

- Built internal tools including a GPT-3 based customer support chatbot and a similar Yammer post detector using **HuggingFace** BERT, **pytorch**, **Power Automate**, and **Azure Functions**, **Azure Containers**.
- Contributed to **gRPC** APIs and configuration utility for NI drivers and devices using **Python**, **C++**, and **.NET Core**.
- Implemented Hardware Licensing Activation API using **Java**, **Spring boot**, **Kubernetes**, and **Azure Pipelines**.
- Modernized NI Volume License Manager by migrating to encrypted **SQLite** from SQL CE, using **.NET**.

**International Institute of Information Technology**, Hyderabad, India — May 2019 – August 2019
*Summer Intern*

- Developed interactive 3D simulation and computer vision web applications using **JavaScript**, **Python**, **OpenCV**, and **Flask**.

## ACADEMIC & PERSONAL PROJECTS

**CourseCOMET – Course & Professor related QnA bot**, University of Texas at Dallas — May 2025
Tools Used: Python, langgraph, MySQL, REACT, NodeJS, Flask, nextjs, Tailwind CSS

- Used **LangGraph** and GPT-4 with prompt engineering and database schema to convert text into SQL queries and SQL results into natural language answers.
- Built a front-end web app using **NextJS**, **NodeJS** and **Tailwind CSS**.

**Sign-opsis – Voice to ASL converter**, HackAI 2025, University of Texas at Dallas — April 2025
Tools Used: Python, langgraph, Google MediaPipe, REACT, NextJS, Tailwind CSS, NodeJS, OpenCV, spacy, flask

- Used ASLCitizens dataset and **Google MediaPipe** to get coordinates for ASL signs and gestures.
- Converted speech to text using OpenAI Whisper and then text to ASL gloss tokens using **spacy**.
- Rendered 3d model of ASL using **PyVista** and generated animation video using **OpenCV** and **Moviepy**
- Created a frontend to take in audio/video file and to play the rendered 3d animation video using **NextJS**.

**Don't Squish the Squirrels – Unity 3D Video Game**, Personal project — January 2025-Present
Tools Used: Unity 3D, C#, Game development

- Fun mini games in **Unity 3D**, with the objective to help cute squirrels collect nuts while avoiding obstacles and predators.

**Character Recognition using CNN**, Personal project — January 2020
Tools Used: Python, Tensorflow, Keras, opencv, kivy

- Trained a CNN using **Keras** to classify handwritten English characters with 94.73% validation accuracy.
- Built an interactive app using **OpenCV** and **kivy** to detect and classify hand-drawn characters in real time.