Shravan Chandrachud
shravanchandrachud0110@gmail.com | +1 (857)339-3097 | Boston, MA, USA | LinkedIn | GitHub | Portfolio | LeetCode

Work Experience

MortgageKart Limited | Software Development Engineer Intern — *April 2025 – August 2025*

- Automated the **AIP/DIP mortgage processing workflow** by implementing intent-based question mapping to accurately align user responses with **varying lender portal requirements**.
- Developed **lender-specific automation scripts** using RobotFramework, Python, Django, and JavaScript, independently handling automation for two lenders while **collaborating with the team** to ensure seamless integration and accuracy.

MeshBA Solutions LLP, Pune | Database Design and Management Intern — *Feb. 2024 – Mar. 2024*

- Designed and managed a **relational database** for a Movie Ticket Booking system, separating master data from transaction data to **improve query performance by 27%** and **maintain data integrity**. Created a SYS table to log admin activities, enabling **auditability** and easy tracking of changes within the database.
- Implemented **stored procedures**, optimized SQL queries, and applied **normalization** principles to achieve 3NF, improving database efficiency and maintainability.

Stralto Global, Pune | *Full Stack Developer Intern* — *Jun. 2024 – Jul. 2024*

- Built the backend and database **from scratch** using a **RESTful API architecture**, implementing router–controller–service patterns to ensure modularity and scalability. This backend **powered both** a mobile application and an admin dashboard, enabling **efficient management of user data**, blog posts, gallery images, and comments
- Developed the **admin dashboard** to monitor and manage user information, blog posts, gallery images, and comments, **providing management with operational control with CRUD operations**.
- Performed **unit testing** for backend services and dashboard modules, **ensuring reliability** and seamless functionality across platforms.

Technical Skills

- **Languages:** Python, C++, C#, Java, Javascript, Solidity.
- **Databases:** PostgreSQL, MySQL, NoSQL (MongoDB).
- **Full Stack Development:** ReactJS, NodeJS, ExpressJs, Three.js, Flask, Django.
- **Game Development:** Unity Engine, Unreal Engine.
- **Machine Learning/ Data Science:** Jupyter Notebook, PyTorch, Scikit-learn, pandas, Matplotlib, Seaborn, Keras, TensorFlow, TensorBoard.
- **Other tools/frameworks:** MySQL Workbench, PgAdmin4, Docker, JIRA, Robot Framework, Remix IDE, Git.

Education

Northeastern University — *Sep. 2025 – Present*
Master of Science in Computer Science — *GPA: 4.0 / 4.0*
Relevant Coursework: *Program Design Paradigms, Algorithms, Foundations of Artificial Intelligence, Machine Learning.*

Savitribai Phule Pune University — *Dec. 2021 – May 2025*
Bachelor of Engineering in Computer Engineering — *GPA: 8.26 / 10*
Relevant Coursework: *Data Structures and Algorithms, Database Management Systems, Software Engineering, Artificial Intelligence, Machine Learning, Deep Learning, Natural Language Processing, Cloud Computing, Software Testing & Quality Assurance, Object Oriented Programming.*

Academic Projects

ZenKraft | ReactJS, NodeJS, ExpressJS, Python, OpenCV, MediaPipe, Flask, MongoDB

- **Led the team** and served as the primary contributor for the **complete system architecture**, implementing a **3-tier web architecture** with **RESTful API** backend and **integrating** frontend, backend, and AI models for a seamless user experience. Conducted **user research** and **surveys** of **200+ participants at yoga centers** to identify common health issues, and collaborated with **certified yoga experts** to design **personalized yoga recommendations**. Planned and developed AI-based **real-time pose detection and correction** using reference images from a **national-level yoga athlete**, ensuring **accurate posture feedback** and improved user safety and effectiveness.

English-to-Italian Language Transformer | Python, PyTorch, TensorBoard

- Architected a **Sequence-to-Sequence** Transformer model from scratch based on the **"Attention is All You Need"** paper, implementing custom **Multi-Head and Cross Attention mechanisms**, **Positional Encodings**, and **Encoder-Decoder blocks** in PyTorch. Engineered a fault-tolerant training pipeline with **state-preserving checkpoints** (optimizer/gradients & model weights) to support long-running jobs, utilizing **TensorBoard** for real-time **loss visualization and cross-attention** map analysis achieving a minimal loss of **2.37**.

* **3D Platformer Game** | Unity, C#, Mixamo

- Engineered a **multi-scene 3D platformer** in Unity, integrating **Mixamo animations** with custom C# logic for **vector-based physics**, level progression, time constraints, and **dynamic scene management**.

Autonomous Snake Agent | Python, PyTorch, NumPy

- Built a **Deep Q-Learning (DQN)** agent in **PyTorch** that masters the Snake game by implementing an **epsilon-greedy** strategy, experience replay, and **Bellman Equation** updates to achieve automated high-score performance.

Simpsons Character Classifier | Python, OpenCV, Keras, TensorFlow

- Engineered a high-performance **Convolutional Neural Network (CNN)** using Keras and TensorFlow for character identification, achieving over **93.67%** accuracy and a loss of **0.07** by implementing **Dropout and Batch Normalization** to maximize generalization and utilizing OpenCV for optimized image preprocessing.