Dilpreet Kaur Syali

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EDUCATION

B.Tech in Computer Science   **Sept 2022 - June 2026**
Graphic Era Deemed to be University   ***Dehradun , UK***

TECHNICAL SKILLS

Languages: C, C++, Python, Java, JavaScript, HTML/CSS, SQL, React
Developer Tools: Git,GitHub , DevOps
Frameworks: Tensorflow , Pytorch , Matplotlib
Coursework: Data Structures and Algorithms (DSA), Operating Systems, DBMS

PROJECTS

AI Virtual Mouse | *Python, OpenCV, MediaPipe, AutoPy, NumPy*   **Jan 2025 - Present**
- Engineered an AI-driven virtual mouse, eliminating **80%** reliance on external hardware.
- Optimized hand tracking via **MediaPipe** and **AutoPy**, ensuring **95% accuracy**.
- Refined cursor precision with smoothing algorithms, enhancing user control.

Knowledge-Based Search Enhancement | *Flask, Firebase, spaCy, GCS-API*   **Dec 2024 - Jan 2025**
- Implemented an NLP-powered search engine, leveraging **Google Custom Search API** for superior relevance.
- Enhanced query execution with **Firebase**, enabling real-time data retrieval.
- Designed an intuitive UI, increasing search efficiency by **35%**.

Smart Dustbin Management System | *IoT, Firebase, Data Analytics*   **Oct 2024 - Dec 2024**
- Spearheaded **EcoHive**, an IoT-powered waste management app serving **500+ users**.
- Integrated Firebase analytics, reducing fuel consumption by **20%** through route optimization.
- Developed an interactive dashboard empowering **100+ members** to monitor and manage disposal schedules.

Spell Corrector | *Java, JavaFX, Trie, Levenshtein Distance*   **June 2024 - July 2024**
- Engineered an intelligent spell correction system, achieving **95% accuracy** with **Levenshtein Distance**.
- Accelerated lookup speed by **40%** using an improved **Trie** data structure.
- Designed a responsive **JavaFX** interface for seamless user interaction.

Handwritten Digit Recognition | *Python, TensorFlow, Keras, CNN*   **June 2024 - July 2024**
- Architected a **CNN**-based recognition model, attaining **98% accuracy**.
- Evaluated model efficacy with **Precision: 0.9868, Recall: 0.9867, F1 Score: 0.9867**.
- Deployed **Matplotlib** for visualizing training performance and insights.

ACHIEVEMENTS

Solved over 200+ DSA problems
Platforms: LeetCode, GeeksforGeeks, Codeforces

Earned advancement to Stage-2 at Algo University
*Ranked in the top **20%** out of **20,000** participants.Secured a spot among the top **4,000** students.*
Certificate Link: View Certificate

POSITIONS OF RESPONSIBILITY

Finance Committee Member   ***BTech Freshers, Sept 2023***
Managed the budget and financial planning.Achieved **70%** of the projected revenue.

Core Member, Technical Team   ***Graphic Geeks Club, Ongoing***
Mentored juniors enhance **DSA** and coding skills through workshops.Received **90%** positive feedback.