SARABDEEP SINGH BILKHU

sanjhbilkhu2006@gmail.com | +91 7042432513 | VPO Dhesian Kahna, Distt. Jalandhar, Punjab, India, 144311 LinkedIn: www.linkedin.com/sarabdeep-singh-bilkhu

Career Objective

Dynamic and forward-thinking Computer Science Engineering student with a keen interest in backend development and machine learning, currently pursuing a Bachelor of Engineering. Experience includes contributions to innovative projects such as a Web-Based Banking System and Gesture-Based Robotics, showcasing strong programming and communication skills. Committed to tackling complex challenges in software development and automation. Eager to engage in opportunities that foster growth and application of skills in real-world scenarios while actively learning in the technology landscape, aspiring to specialise in backend development and AI-driven solutions in the fintech or automation industry.

Experiences

Gesture-Based Robotics with OpenCV & MediaPipe Nov, 2024 – Apr, 2025

Developer

As a Developer for the Gesture-Based Robotics project, my responsibilities include implementing computer vision algorithms that recognize user gestures and translate them into actionable commands for robotic systems. Utilizing OpenCV and MediaPipe enables the creation of intuitive interfaces that enhance user interaction with robotics. This project emphasizes innovation and practical applications of machine learning in robotics.

- Developed gesture recognition algorithms using OpenCV.
- Integrated MediaPipe for real-time processing of user inputs.
- Enhanced user engagement through interactive robotics solutions.

Web-Based Banking System

Oct. 2024 - Dec 2024

Backend Developer

The focus of the Backend Developer role for the Web-Based Banking System is on creating and maintaining the server-side components essential for banking operations. This involves crafting robust and secure APIs to facilitate seamless transactions and ensure data integrity across various services. Engaging with a team of developers allows for collaborative problemsolving and efficiency in delivering top-notch banking solutions.

- Engineered secure APIs to support transaction processing.
- Ensured high availability and reliability of backend services.
- Collaborated with front-end teams to enhance user experience.

Educational Qualifications

April, 2024
Rajgomal, Jalandhar

Higher Secondary Certificate (10th: 92.4%, 12th: 84.6%)

S.T.S. World School

Expected in June, 2028 Gharuan, Mohali Bachelor of Engineering - Computer Science (Current: 9.00/10.00)

Chandigarh University

Awards

- **Codewars**: Achieved a rank of 4 kyu in coding challenges.
- Project Exhibition (Top 50): Recognized for innovation and technical skills.
- **NCC Alumni:** Demonstrated leadership, discipline, and teamwork.
- "Programming in Python: A Hands-On Introduction": Completed a certified Python course on Coursera.
- "Academic Writing Skills and IPR": Completed a certified Research Paper Writing course on LinkedIn Learning.
- "Design Thinking and Creativity for Innovation": Completed a certified course for Design Thinking on LinkedIn Learning.

Skills

- Backend Development
- Machine Learning
- Computer Vision
- Team Collaboration
- Proficient in Python

- AI/ML (numPy, Pandas)
- SQL Proficiency
- Effective Communication
- Data structures
- Object-oriented programming

Extracurricular Activities

National Cadet Corps (NCC) May, 2020 - Apr, 2022 Competitive Coding: 4 Kyu Rank on Codewars

Hackathon Participant: Collaborated on innovative tech solutions

Hobbies

- Coding (*Python, SQL, C++*)
- Machine Learning (OpenCV, MediaPipe)
- Robotics (Arduino, Gesture-based Robotics, IoT)
- Mathematics (Data Structures, Calculus, Linear Algebra)
- Problem-Solving & Logical Thinking

- Teamwork & Leadership (NCC Alumni, Project Exhibition Rank: Top 50)
- Public Speaking & Communication
- Football

References

Dr. Vikas Mittal (Assistant Professor) Chandigarh University +91 9416328507 Mr. Gagan Bhatti (Head of Physics Dept.) S.T.S. World School +91 9914289831

Signature

