Vivek Jindal

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Education

- **Medicaps University** — Indore, India
  Master of Technology in Computer Science & Engineering; GPA: 8.71 — *Aug. 2022 – June 2025*
- **Sushila Devi Bansal College of Technology (Aff. to RGPV, Bhopal)** — Indore, India
  Bachelor of Technology in Computer Science & Engineering; GPA: 6.93 — *Aug. 2018 – June 2022*

Experience

- **Medicaps University** — Indore, India
  Teaching Assistant — *Oct 2022 - Present*
  - **Laboratory and Teaching Support**: Conducted lab sessions for B.Tech CSE students in Data Structures, Algorithms, and Database Systems; assisted in preparing and evaluating lab work.
  - **Academic Assistance**: Supported faculty in course material design, lab manuals, and student guidance for core technical subjects.
  - **Research and Departmental Engagement**: Contributed to faculty research and departmental projects through documentation, literature review, and technical support.
  - **Departmental Media and Outreach**: Managed departmental social media handles, increasing engagement by 30% through targeted academic and research content.

Research Publications

[1] Pankaj Piplode, Kailash Kumar Baraskar, Pinkey Rane and Vivek Jindal, *"ResNet-152 for Early Skin Cancer Detection: A Deep Learning Approach to Medical Imaging,"* **GRENZE International Journal of Engineering and Technology**, vol. 11, no. 2, pp. 10126–10135, 2025. Available at: https://thegrenze.com/id=8.

[2] Vivek Jindal, Latika Jindal, Kailash Chandra Bandhu and Ratnesh Litoriya, *"Automating cricket scorecards with deep neural network: a next-generation approach,"* **Parul University International Conference on Engineering and Technology 2025 (PiCET 2025)**, Hybrid Conference, Vadodara, India, 2025, pp. 1587–1594, doi: 10.1049/icp.2025.1671 *(Scopus Indexed).*

[3] Yash Kumavat, Priyanka Dhasal, Divya Kumawat, Yash Agarwal, Yash Mewada and Vivek Jindal, *"Automated disease detection in banana using convolutional neural networks (CNNs),"* **Parul University International Conference on Engineering and Technology 2025 (PiCET 2025)**, Hybrid Conference, Vadodara, India, 2025, pp. 1572–1579, doi: 10.1049/icp.2025.1669 *(Scopus Indexed).*

Patents

[1] Indian Patent No. 202421088334 *"A Hybrid Blockchain Architecture Employing ML Models for Real-time Fraud Detection System,"* issued Dec 6, 2024. This invention integrates blockchain transparency with machine learning's predictive capability to detect financial and e-commerce frauds in real time, using federated ML models, smart contracts, and hybrid public-private blockchain networks to preserve privacy and ensure adaptive fraud prevention.

[2] Indian Patent No. 202311037100 *"System and Method for Fault Detection Using IoT and AI-powered Object Recognition in the Manufacturing Process by Industry 4.0,"* issued Jun 30, 2023. The system employs IoT sensors and AI-based visual recognition to identify and classify industrial faults in real time, enhancing predictive maintenance and minimizing production downtime in smart manufacturing environments.

Certifications

[1] **Oracle APEX Cloud Developer Certified Professional**, Oracle, issued Sep 2025. Skills: APEX Programming, PL/SQL, Application Security, Data Management, Generative AI. Credential: View Certificate

[2] **ChatGPT Prompt Engineering: Examples & Use Cases**, Skillsoft, issued Aug 2025. Credential ID: 157549689. Credential: View Certificate

[3] **Generative AI APIs for Practical Applications: An Introduction**, Skillsoft, issued Aug 2025. Credential ID: 157423855. Credential: View Certificate

[4] **Delivery Practice School**, Accenture, issued Aug 2025. Credential ID: 157549692. Credential: View Certificate

[5] **Fortinet Certified Associate Cybersecurity**, Fortinet, issued Jul 2024, expires Jul 2026. Credential ID: 8507199802VJ. Credential: View Certificate

[6] **Fortinet FortiGate 7.4 Operator**, Fortinet, issued Jul 2024. Credential: View Certificate

[7] **Google Cloud Fundamentals: Core Infrastructure**, Google, issued Jan 2023. Skill: Google Cloud Platform (GCP). Credential: View Certificate

[8] **Set Up and Configure a Cloud Environment in Google Cloud**, Google Cloud Skills Boost, issued Jan 2023. Credential ID: 3110371. Credential: View Certificate

[9] **Create and Manage Cloud Resources**, Google Cloud Skills Boost, issued Dec 2022. Credential ID: 2980784. Credential: View Certificate

[10] **Perform Foundational Infrastructure Tasks in Google Cloud**, Google Cloud Skills Boost, issued Dec 2022. Credential ID: 2982082. Credential: View Certificate

Projects

[1] **Cricket Scorecard Automation**

- Developed a CNN-based system to automate cricket scorecard generation by interpreting umpire hand gestures from image data.
- Achieved 98% accuracy, improving efficiency by 10% over baseline methods, and enhanced real-time decision-making in cricket scoring.

[2] **Automated Disease Detection in Banana**

- Designed a CNN-based image classification model to identify banana leaf diseases such as Bacterial Wilt, Fusarium Wilt, and Black Sigatoka.
- Outperformed VGG-16, ResNet-50, and EfficientNet models, reaching 96.1% accuracy with high precision and recall. Proposed a scalable framework for automated plant health monitoring.

[3] **Plant Recognition System**

- Built a deep learning model using CNNs to detect plant species from leaf images.
- Optimized for high-accuracy classification with potential scalability for plant disease detection in agricultural and botanical applications.

[4] **Career Guidance System**

- Developed a recommendation-based system to assist students in selecting suitable career paths.
- Integrated a rule-based matching engine with offline counseling support to enhance user satisfaction and accessibility.