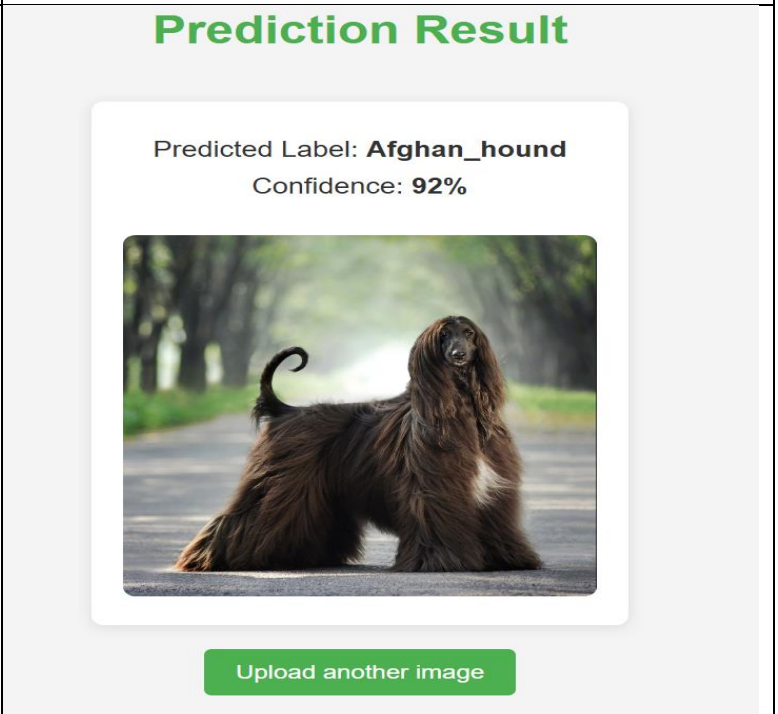
MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

Institution's Innovation Repository

Idea/Proof of Concept (PoC) & Innovation/Prototype Submission Form

S.NO	Field Name	Description
1	**Title**	MOBILENETV2 INTEGRATION FOR HIGH-PERFORMANCE IMAGE CLASSIFICATION WEB APP
2	**Developed as part of**	Academic Requirement
3	**Choose the Financial Year, during the Idea-PoC/Innovation Developed**	2023-2024
4	**Sector / Domain**	Rural Development, Sustainable Environment
5	**Innovation Type**	Process
6	**Development Stage - Technology Maturity of the Solution/Innovation in terms of Technology Readiness Level TRL**	TRL 2: Technology formulation,concept and application have been formulated.
7	**Define the problem and its relevance to today's market/ society / industry need.**	The integration of MobileNetV2 for high-performance image classification in web applications addresses the growing demand for efficient AI solutions across various industries. As businesses increasingly rely on real-time image processing for applications like e-commerce, healthcare, and security, MobileNetV2's lightweight Its ability to perform well with limited computational resources positions it as a valuable tool for developers aiming to

		enhance their applications with advanced image classification capabilities
8	**Describe the Solution / Proposed / Developed**	MobileNetV2 is a lightweight convolutional neural network designed for efficient image classification, making it suitable for deployment in web applications. Its architecture features an inverted residual structure and depthwise separable convolutions, which enhance performance while minimizing computational load.For high-performance image classification, integrating MobileNetV2 into a web app involves leveraging transfer learning from pre-trained models, allowing for rapid adaptation to specific datasets. This enables real-time classification capabilities, essential for applications requiring quick responses, such as face mask detection or object recognition in various environments
9	**Explain the uniqueness and distinctive features of the (product / process / service)solution.**	MobileNetV2 offers a unique solution for high-performance image classification in web applications through its lightweight architecture and efficient processing capabilities. It utilizes an inverted residual structure with thin bottleneck layers, enhancing speed and accuracy while minimizing computational demands. This model excels in real-time classification, making it suitable for deployment on mobile devices and web platforms.
10	**How your proposed / developed(product / process / service) solution is different from similar kind of product by competitors if any**	The proposed integration of MobileNetV2 for high-performance image classification in a web application stands out from competitors by emphasizing real-time processing capabilities and a user-friendly interface. Unlike many existing solutions that require substantial computational resources, this integration leverages
11	**Is there any IP or Patentable Component associated with the Solution?**	NO
12	**Has the Solution Received any Innovation Grant/Seed fund Support?**	NO

16	**Are there any Recognitions (National/International) Obtained by the Solution?**	NO
17	**Is the Solution Commercialized either through Technology Transfer or Enterprise Development/Start-up?**	NO
18	**Had the Solution Received any PreIncubation/Incubation Support?**	NO
19	**Video URL**	https://drive.google.com/file/d/1Cm6EcaqK_SRe-RSqtYzGOGc-IpPmosni/view?usp=drive_link
20	**Upload Photograph: (JPG, PNG max 2 MB)**	

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PROJECT CO ORDINATOR

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