



## Department of Computer Engineering

A.Y. 2024-25

### Major Project (Sem VII) Sustainable Development Goals Mapping

Sr. No.	Title of the Proposal	SDG Number	SDG Name	Potential Applicability
1	IoT Based Hydroponic system for efficient Indoor Farming	2	Zero Hunger	Supports sustainable agriculture and food production through smart indoor farming.
2	Analysis of double columnar transposition cipher using dynamic encryption and its integration with other techniques	9	Industry, Innovation and Infrastructure	Advances secure digital infrastructure and fosters innovation in cybersecurity.
3	Urban Planning using stallelite Images	11	Sustainable Cities and Communities	Enhances sustainable urban development, infrastructure planning, and smart cities through geospatial technology.
4	E voting system encryption using quantum resistant cryptography solution	16	Peace, Justice and Strong Institutions	Enhances secure and trustworthy electoral systems and democratic institutions.
5	Mutilingual Real time transaltion chat and Voice call applictaion	10	Reduced Inequalities	Promotes inclusivity and accessibility across language barriers.
6	Advanced medical image diagnosis using deep learning	3	Good Health and Well-being	Improves early and accurate disease diagnosis, supporting healthcare.
7	Liver cirrhosis stage prediction and survival detection	3	Good Health and Well-being	Aids in timely treatment decisions and risk stratification for patients.
8	Jump-starter: Automated tool to initiate any project using an intelligent automation assistant	9	Industry, Innovation and Infrastructure	Streamlines digital transformation and boosts innovation productivity.
9	Predicting Heart Rate from facial Videos	3	Good Health and Well-being	Enables non-contact vital monitoring, useful in telemedicine and remote care.
10	Vernacular Air writing Interpreter: Revolutionizing real time text recognition and translation	4	Quality Education	Promotes literacy and digital access through innovative writing interpretation.
11	DVS Translator	10	Reduced Inequalities	Assists hearing/speech-impaired users through sign language or video support.
12	AI for automated social media content	9	Industry, Innovation and Infrastructure	Enhances content automation and innovation in digital media.
13	AutoML: Framework for automated	9	Industry, Innovation and	Democratizes AI by enabling non-experts to

	machine learning		Infrastructure	build ML models.
14	Sentiment based music generation: FOcusing on emotional arc lyrical composition	3	Good Health and Well-being	Supports emotional well-being through AI-driven expressive content.
15	Optimizing public transport system using ML to increase efficiency	11	Sustainable Cities and Communities	Promotes smarter, greener, and more efficient urban mobility.
16	Virtual real estate assistant for efficient property searching	11	Sustainable Cities and Communities	Improves access to housing and urban infrastructure planning.
17	Smart Leakage Detection Robot	6	Clean Water and Sanitation	Helps prevent water wastage and infrastructure damage.
18	Satellite Imagery Analysis: Unified segmentation and caption generation	13	Climate Action	Aids environmental monitoring and land-use planning through AI.
19	Integrating genetic algorithms into large language models	9	Industry, Innovation and Infrastructure	Enhances AI capabilities, fostering innovation in computing.
20	Prevention of LLM poisoning	16	Peace, Justice and Strong Institutions	Ensures trustworthy and safe AI systems to support fair institutions.
21	Optimized IDS for IIoT networks using the EDGE-IIoT dataset and BAGAN based data augmentation	9	Industry, Innovation and Infrastructure	Boosts cybersecurity in critical smart industry infrastructure
22	Candidate ranking for hiring using graph neural networks	8	Decent Work and Economic Growth	Supports fair, data-driven hiring processes and job market efficiency.
23	HabitLens	3	Good Health and Well-being	Encourages healthy routines and behavior through personal tracking.
24	Scholarly paper analysis and recommendation system	4	Quality Education	Improves access to academic knowledge and research productivity.
25	Precision Farming	2	Zero Hunger	Promotes sustainable agriculture through data-driven farming methods.
26	Vet Assistant AI for tele medicine	3	Good Health and Well-being	Improves animal health services in rural or remote areas.
27	Exploring Kolmogorov-arnold networks (KANS) for enhanced OCR	4	Quality Education	Enhances access to written content through better text recognition.
28	Analysing Impact of government formation	8	Decent Work and	Provides insights into economic policy impacts



	on financial markets in India		Economic Growth	and stability.
29	AI driven diagnostic system for Retinal diseases	3	Good Health and Well-being	Enables early detection and treatment of vision-related illnesses.
30	Haptic feedback and sensor based sports training assistant	3	Good Health and Well-being	Promotes physical fitness and better athletic training methods.
31	Smart Wallet for gasless transactions	8	Decent Work and Economic Growth	Advances digital financial inclusion and cost-effective transactions.
32	Almari: Fashion App	12	Responsible Consumption and Production	Encourages mindful clothing consumption and personalization.
33	Automated mispronunciation detection and correction using voice cloning	4	Quality Education	Enhances language learning and speech correction effectively.
34	AI based prescriptive medication and recommendation for skincare via precision medicine	3	Good Health and Well-being	Supports personalized and accessible dermatological care.
35	ProfilX: Ai driven LinkedIn Insight Engine	8	Decent Work and Economic Growth	Helps optimize career planning and professional networking.
36	Real time network graph generation from News data and Source identification	16	Peace, Justice and Strong Institutions	Strengthens media literacy and curbs misinformation.
37	CityWatch: Wearable device and app based Emergency response system	11	Sustainable Cities and Communities	Enhances personal safety and smart city emergency management.
38	Analysis if accurate legal case similarity and retrieval	16	Peace, Justice and Strong Institutions	Supports faster and fairer legal processes through AI tools.
39	Transforming Legal research and prediction with Ai powered case law analysis	16	Peace, Justice and Strong Institutions	Improves access to justice through smart legal research.
40	High Performance Big data machine learning analytics using GPU ( CUDA C)	9	Industry, Innovation and Infrastructure	Enables high-efficiency AI applications for various industries.
41	Self Prompting API using reinforcement learning	9	Industry, Innovation and Infrastructure	Boosts intelligent automation and model efficiency.
42	AI Travel Planner	8	Decent Work and Economic Growth	Supports tourism industry through personalized planning tools.
43	Natural Language to SQL and NoSQL	9	Industry, Innovation and	Simplifies data access and innovation for non-



	Conversion		Infrastructure	technical users.
44	Plant disease identification, tracking and cure	2	Zero Hunger	Helps farmers prevent crop loss and promote food security.
45	Snap-X: Real Time X ray imaging for the mobile generation	3	Good Health and Well-being	Makes diagnostics more accessible and mobile-friendly.
46	Quantitative Portfolio Rebalancing and Optimization	8	Decent Work and Economic Growth	Improves financial decision-making and investment strategies.
47	PrakritiBot: Holistic Health care bot	3	Good Health and Well-being	Encourages personalized and preventive health approaches.
48	Voice enabled user interface for geospatial map based	11	Sustainable Cities and Communities	Enhances accessibility and smart urban management via maps.
49	Asset Allocation Using Explainable AI	8	Decent Work and Economic Growth	Promotes transparent and data-informed financial planning.
50	AI powered real time notes generation from lecture videos	4	Quality Education	Boosts student learning and accessibility in classrooms.
51	Neo Cloud	9	Industry, Innovation and Infrastructure	Supports scalable cloud infrastructure for digital transformation.
52	GROUND NEWS	16	Peace, Justice and Strong Institutions	Encourages balanced news consumption and media transparency.
53	XAI -Design Assist :Explainable AI for Generative Product and Graphic Design	9	Industry, Innovation and Infrastructure	Enhances creative industries with ethical and explainable AI.
54	AI-powered Wildlife Monitoring Using Camera Traps	15	Life on Land	Supports biodiversity conservation and wildlife protection.
55	PricePulse: Product Price Optimization	12	Responsible Consumption and	Helps reduce waste and promote informed consumer choices.
56	Diabetes detection using	3	Good Health and Well-being	Early detection and intervention for chronic disease management.


 A circular red stamp with a handwritten signature in the center. The text around the border of the stamp reads "Dr. CHETASHRI BHADANE" and "Head, Computer Engineering".

**Head, Computer Engineering**

**Dr. Chetashri Bhadane**

**Head, Computer Engineering**

**Dr. Meera Narvekar**

**Prof. Ruhina Karani**