AI Projects: 100 Examples

Cyber Security/Social Media

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1. Detecting incidents of cyber bullying
Input: text feed from social media conversations
Output: cyber bullying victim and bully identified

2. Characterizing mental stress and suicidal tendencies
Input: text feed from online profiles and conversations
Output: people suspected to have stress or suicidal tendencies are flagged

3. Detecting click-fraud in online advertising
Input: click data from online advertisement
Output: fraudulent clicks and click patterns detected

4. Detecting fake news in online news media
Input: news feed from online media
Output: fake news, rumours, clickbait characterised

5. Identifying hate crime in online media
Input: text feed from online conversations
Output: hate speech, offensive comments, racist comments etc. detected

6. Malware identification
Input: executable files (.exe) of several software/apps
Output: malicious software/apps identified

7. Intrusion detection in enterprise networks
Input: network logs from router/switches of enterprise networks
Output: possible intrusions, botnet activity, DDoS activity, etc. flagged

8. SMS/IM spam filtering
Input: messages from SMS or IM apps (WhatsApp, Line, etc.)
Output: spam messages filtered

9. Detection of malicious URLs
Input: Visited URLs
Output: malicious URLs (hosting exploit kits, malware, etc.) are detected

10. Detecting phishing websites
Input: website URL
Output: phishing websites flagged

Robotics and Automation

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11. Detecting shapes of common and uncommon objects
Input: different objects
Output: robot classified the shapes
12. Determining size of boxes
Input: different size of boxes
Output: robot determines the size of the box

13. collision avoidance using video processing
Input: a path for the robot to move on
Output: robot avoids collision with objects like a wall etc.

14. Personalized greetings
Input: live video feed
Output: robot makes personalized greetings (text or speech) to the people

15. Optimal path traversal
Input: starting point and destination point
Output: robot calculates and traverses optimal path

16. Detecting dangerous objects at public places
Input: live video feed
Output: robot detects dangerous objects (knife, explosives, etc.)

17. Automating indoor weather adjustments
Input: indoor weather data (temperature, humidity, etc.) and user preferences
Output: auto-adjustment as per user preferences

18. Detecting flawed packaging
Input: photo/video of packaged products/consignments
Output: flawed or broken packaging is detected

19. Monitoring for thieves and intruders
Input: live video feed
Output: a given person is thief/intruder or not

20. Monitoring for safety hazards
Input: video feed of industry area
Output: safety hazards detected

Agriculture

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21. Predicting the crop based upon the soil
Input: images of the soil and climate information
Output: Predicting the suitable crop

22. Damage assessment of crops because of the bad weather conditions
Input: images of the crop before and after the damage
Output: Prediction of damage level and crop insurance

23. Automatic Health inspection
Input: Multiple images of a plant.
Output: Prediction of health of the plant and possible medicines

24. Automatic soil testing using AI
Input: Images of the soil
Output soil health

25. Weather and crop-based irrigation system.
Input: Weather condition and crop information (crop age, crop type)
Output: Irrigation is required or not

26. Assessment of grain of production
Input: crop image of the whole field
Output: prediction of quantity of grain production

27. Disease Detection in the plants
Input: image of the plant
Output: disease and pesticide recommendation

28. Recommendation of crop based upon the crop history
Input: crop history
Output: Recommended crop with fertilizer

29. Chatter bot for farmers
Input: Knowledge base of the crops in the regional language.
Output: Required information through chat bot

30. Crop Waste management
Input: Images of the waste
Output: Companies and their contacts where these wastes are useful.

Social Media

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31. Suggesting Engaging Content for Social Media
Input: Browsing History and previously watched content
Output: Customized Content

32. AI-Powered Image Recognizers from Social Media
Input: Image of the target (Person)
Output: Identified person

33. Smart Messenger Bots by understanding the personality
Input: Social Media feed of the person
Output: Messenger bot reply based upon his personality.

34. Better career and Job Suggestions
Input: Social Media and LinkedIn feed of the person
Output: Understanding the skills and job suggestion

35. Reaching the right audience
Input: Understanding the search history in social media websites
Output: Better Product suggestions.

36. Understanding the content on the social media websites and predicting the possible violence
Input: Social Media feed
Output: Predicting the location and probability of violence and prepare accordingly.

37. Understanding the personality and probability of joining terrorist groups
Input: Social Media feed and search history
Output: Predicting a person who might join terrorist group or who is an easy target which can be influenced

38. Understanding the stress level of students
Input: Social Media feed
Output: Predicting the stress level of students and based upon stress level give them consultation.

39. Predicting the fake locations on social Media
Input: Image uploaded by user
Output: Predicting exact location

40. Predicting the molesters and eve-teasers
Input: Social Media feed and history
Output: Predicting the behaviour of a person.

Healthcare

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41. Physiotherapy exercise monitoring application
Input: Real time video of user doing physiotherapy exercise
Output: recognized exercise and its counting, detection of wrong exercise positions

42. Health monitoring application using wearable devices
Input: Heart beat rate, blood pressure, motion data from wearable devices
Output: statistics of average, alerts of health problems

43. Skin disease detection app
Input: Photos of skin surface taken in a mobile camera
Output: Recognized skin disease and its severity

44. Detecting face features, hair loss, wrinkles, pimples
Input: face photos of users taken from mobile camera
Output: Detection of hair loss, wrinkles, pimples and their counts etc

45. Food recognition and calorie, vitamin detection
Input: Food phots taken from mobile camera
Output: Recognized food and its calorie and vitamins

46. Finger print based disease detection
Input: Finger print data taken from mobile device
Output: Detected disease or health status of the user

47. X-Ray image description app
Input: Photo of X-Ray taken from the mobile app
Output: Description and results about the X-Ray and detection of disease or health issue

48. Assistive app for autism, Parkinson, Alzheimer diseases
Input: images/video/audio containing sounds/gestures of the user
Output: assistance, helps, recommendations to the user

49. Doctor and medical shop recommendation app
Input: Disease/symptoms and current location of the user, social media, review data
Output: Recommendation of doctors/hospitals and medical shops, route to the locations

50. Walking pattern monitoring for arthritis
Input: Real time video of user walking
Output: Analysis of walking pattern and further recommendation for improvement

Crowd

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51. Finding people who are lost
Input: Photo of the lost person and crowd images/videos
Output: Detections of the lost people

52. Head counting application
Input: Photo or video taken from mobile camera
Output: Number of human heads in the image i.e. people count

53. Identifying objectionable persons
Input: Photo or video taken from a mobile or surveillance camera in a highly crowded environment
Output: Detection of the objectionable person in the crowd images

54. Weapon detection from crowded environment
Input: Photo or video taken from a mobile or surveillance camera in a highly crowded environment
Output: Detections of weapons, type and person who carry

55. Identifying people group in a curfew/ section 144
Input: Photo or video taken from a mobile or surveillance camera in a highly crowded environment
Output: Detections of group of people and their counting and further alerting

56. Detecting persons with deviated yoga or dance pattern
Input: Real time video taken from mobile or surveillance camera in a building
Output: people with different pattern of dance or yoga moves differing from the crowd

57. Identifying people with unique outfit/getup
Input: Photo or video taken from a mobile in a highly crowded environment
Output: individuals with unique outfit/makeup/gesture

58. Unusual activity, loitering detection in Mall
Input: Real time video stream from surveillance camera in Malls
Output: Individuals who are loitering in the Mall having random and suspicious waling patterns

59. Detecting smokers in no smoking areas
Input: Real time video stream from surveillance camera
Output: individuals who violate the no-smoking rule in the public/private places

60. Counting animals/birds in a farm land or open area
Input: Real time video stream from drone camera or mobile
Output: number of total animals/birds in a group category wise

Entertainment

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61. Generating video from photo Gallery of a mobile
Input: Photos of user from the camera
Output: Video containing the photos presented in an interesting way with animation and music

62. Hands-free mobile control using frontal camera app
Input: Face gestures fed through the frontal camera of a mobile
Output: Actions on the mobile such as clicks, swipe, long press etc

63. Face morphing with Indian cultural face make-ups
Input: Face photo/video taken from the frontal camera of a mobile
Output: Morphed faces with make-up of Indian regional cultures

64. Real-time video player for streaming/playing low resolution videos
Input: Low resolution videos of 144p or 180p
Output: High resolution videos of 720p or 1080p

65. Fast painting style transfer app to selfies and other photos
Input: Photos taken from frontal or back camera
Output: Stylised painting like photo based on different painting styles

66. Singing synchronization app for mixing user voice with music
Input: Audio of song sung by the user
Output: Mixed song with background music with voice from user audio

67. Augmented Reality app for animating mobile videos
Input: Videos taken by the users
Output: Animated videos with animated 3D characters within it

68. Personalized music recommendation app for mobile
Input: song playlist history, likes and dislikes of the user
Output: Song recommendations based on user interest, mood and timing

69. Chatbot for stress buster
Input: User chat comments/questions
Output: Replies comments that will relieve the stress of the user

70. Video summarization app for mobile users
Input: Lengthy video from the user
Output: Short summary video containing interesting segments

Space Research

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71. Stars recognition using mobile apps
Input: Sky photos taken from mobile camera
Output: Labelled Stars/star groups on the photos

72. Environment conditions detection using mobile camera apps
Input: Outdoor photos taken from mobile phones
Output: Air pollution level, cloud, lighting information detected automatically

73. Traffic control application using satellite images
Input: Satellite images of roads
Output: Traffic congestion detection results and recommendations

74. Detecting popularity of a business venue using satellite images of parking lot
Input: Satellite images of parking lots
Output: popularity level of that business venue

75. Satellite farming using remote sensing images/ drone images
Input: Satellite images or drone images of farm lands
Output: Monitoring, inventory estimation, yield prediction, strategies & plans for farming

76. Automated drone navigation system
Input: Real time video feed from the drone camera
Output: Navigation actions and real time physical motion to the target locations

77. UMV or Drone detection system for border security
Input: Real time video feed from HQ surveillance cameras
Output: detections of UMV or drones and their locations

78. Location recognition apps from Airplanes
Input: Photos of land taken from airplanes
Output: Recognized places and their information

79. Drone based security system
Input: Real time video stream from drone cameras
Output: Detected objects, people, animals, activities, accidents, intruders etc.

80. 3D reconstruction of a building or land using Drone cameras
Input: Aerial video taken from drone camera
Output: 3D model of the location/buildings

Business

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81. Chatbot development for regional languages
Input: Chat commands written in regional languages
Output: Automated responses in regional language

82. Robust face recognition system for loan/insurance fraud prediction
Input: Face photos and related information of a loan applicant
Output: Detection whether specific applicant has committed loan/insurance fraud

83. Question answering system for automated customer relationship management
Input: Questions from customers spoken/written in regional languages
Output: Answers (spoken/written) from the automated system in regional language

84. Face emotion detection for customer relationship management
Input: Real-time video of customer in a services/customer care place
Output: Detections of user emotion such as stress, happy for guidance to the service provide or customer care responder

85. Salient region detection for targeted advertisements placement
Input: Image or streaming video of sports/movie etc.
Output: Location inside video frame where ad will be posted

86. Customer emotion detection for telephony customer care
Input: Real-time audio of the customer care call
Output: Detections of user emotion such as stress, happy for guidance to the customer care responder

87. Product requirement analysis from social media
Input: comments, reviews from users of particular topic or need
Output: Detections of whether particular feature or product is currently needed for the customers

88. Scheduling and planning apps for sales person
Input: Schedule, target, location of the sales person
Output: Reminders, route recommendations, plans for sales execution

89. Mobile app for quick prediction of production time and cost
Input: Requested number of quantity and specification of a product
Output: Production time and cost to make the specific number of products

90. Work monitoring system for surveillance videos in production environment
Input: Real time video feed from surveillance cameras in a product production environment
Output: Detection of events, accidents, people activities, loitering etc

Journalism

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91. News article summarization app
Input: News article in text format
Output: Summary of news as a short text

92. News text to video generation app
Input: News article with text and images
Output: Interestingly presented video with news elements, animations and attractive audio

93. Fake news alert app
Input: News article with text and images
Output: Detection results whether article is fake or from trustable source

94. Provocative article detection for safe surfing
Input: News article with text and images
Output: Detection results whether article contain controversial/violent content against religious views/national integrity that will induce violence or riot

95. Finding famous and relevant Tweets of news articles
Input: News article with text and images
Output: Neatly presented famous tweets from celebrities/active twitter users on specific issues that news article deals with

96. Personalized News Recommendation App
Input: News articles, previous history of user, ratings etc
Output: News articles matching interest and history of the user

97. Multisource news summarization for summarizing news on same topic
Input: Multiple news articles dealing with same news
Output: Summary of news content as a short text

98. User emotion detection for news article impact analysis
Input: News article, face images of the user while reading news, history of articles read by user
Output: Prediction of emotions of a user for different articles

99. News popularity detection in social media
Input: News article and its relevant social media feed
Output: Popularity level of a news story

100. News generation from tweets of certain topic
Input: Twitter feed related to certain event or topic
Output: Generated news story related to the famous tweets