



Complete Python AI-ML IEEE Projects 2026 – 2027 Titles

Cybersecurity

1. AI-Powered Phishing and Quishing Detection Using Multi-Model Machine Learning
2. AI-Driven DDoS Attack Detection and Explainable Network Security Response
Using Machine Learning
3. AI-Driven Network Intrusion Detection System and Automated Threat Response
Using Machine Learning
4. Explainable AI-Based Android Malware Detection and Risk Analysis Using Machine
Learning
5. Ransomware Detection Using Machine Learning and Deep Learning with Explainable
AI
6. AI-Powered Web Vulnerability Scanner and Security Assessment Using
Reinforcement Learning and Generative AI
7. Credit Card Fraud Detection Using Machine Learning
8. E-Commerce Transaction Fraud Detection Using Machine Learning
9. Spam and Phishing Email Detection Using Machine Learning with Explainable AI
10. Fake News Detection and Real-Time News Credibility Verification Using Machine
Learning
11. Ad Click Fraud Detection Using Hybrid Machine Learning and Behavioral Telemetry
Analysis
12. Fake Review Detection using Machine Learning
13. Crime Hotspot Detection and Future Crime Rate Prediction using Machine Learning
14. Instagram Fake Account Detection using Machine Learning
15. Deepfake Detection using Deep Learning



16. Semantic Text Steganography Framework for Secure and Covert Information Hiding
17. Image-Based Malware Detection Using Deep Residual CNN with Explainable AI
18. Fraud App Detection and Risk Assessment using Machine Learning
19. Cyberbullying Detection in Online Communication using Machine Learning
20. Anomaly Detection in Network Traffic Using Advanced Machine Learning Techniques
21. Advanced Fake Job Post Prediction Using Machine Learning for Online Recruitment Scam Detection
22. AI-Powered Android Malware Detection using Machine Learning
23. Advanced Fake Product Review Detection using Machine Learning
24. Online Exam Proctoring System using Deep Learning
25. Detection of Fraud Scam Calls Using Machine Learning
26. Malicious and Phishing URL Detection Using Machine Learning
27. Fake Facebook Profile Detection Using Machine Learning
28. Malware Analysis and Detection Using Machine Learning Algorithm
29. SMS Spam Detection using Machine Learning
30. E-Commerce Fraud Detection Based on Machine Learning
31. Cyber Hacking Breaches Prediction and Detection Using Machine Learning
32. Fake Profile Detection on Social Networking Websites using Machine Learning
33. Crime Prediction Using Machine Learning and Deep Learning
34. Detection of Phishing Websites Using Machine Learning
35. Electricity Theft Detection in Smart Grids Based on Deep Neural Network
36. Intrusion Detection System Using Improved Convolution Neural Network
37. Intrusion Detection System Using PCA with Random Forest Approach
38. An Efficient Spam Detection Technique for IoT Devices Using Machine Learning



39. Credit Card Fraud Detection Using State-of-the-Art Machine Learning and Deep Learning Algorithms
40. Fraud Detection and Analysis for Insurance Claim using Machine Learning
41. Fraud Detection on Bank Payments Using Machine Learning
42. A Comparative Study on Fake Job Post Prediction Using Different Data mining Techniques
43. WELFake: Word Embedding Over Linguistic Features for Fake News Detection
44. Detecting Fake Reviews Using Multidimensional Representations With Fine-Grained Aspects Plan
45. Detecting Spam Email With Machine Learning Optimized With Bio-Inspired Metaheuristic Algorithms
46. Email Spam Detection Using Machine Learning Algorithms
47. Defensive Modeling of Fake News Through Online Social Networks
48. FAKEDETECTOR: Effective Fake News Detection with Deep Diffusive Neural Network
49. Spam Review Detection Using the Linguistic and Spammer Behavioral Methods
50. Review Spam Detection using Machine Learning
51. Detection of Fake and Clone accounts in Twitter using Classification and Distance Measure Algorithms
52. Detection of Malicious Social Bots Using Learning Automata With URL Features in Twitter Network
53. Crime Type and Occurrence Prediction Using Machine Learning Algorithm
54. Comparison of Machine Learning Algorithms for Predicting Crime Hotspots
55. Digital Image Forgery Detection Using Deep Learning
56. Signature Fraud Detection using Deep Learning



57. Crime Rate Prediction and Analysis using k-means Clustering Algorithm

58. Fraud App Detection using Sentiment Analysis

GEN AI PROJECTS

59. Personalized Diet, Fitness, and Workout Recommendation Using Machine Learning

60. Intelligent Personalized Recipe Generation Using Gen AI

61. AI-Powered Intelligent Resume Builder Using Generative AI

62. Automated Resume Screening and Candidate Ranking Using AI

63. AI-Based Academic Research Paper Generation and Assistance System

64. AI-Driven Adaptive Learning Journey Recommendation System

65. AI-Driven Intelligent Mock Interview and Candidate Assessment System

RAG based Projects

66. Intelligent Legal Assistance using RAG

Chatbot Projects

67. AI-Powered Mental Health Support Chatbot

68. Smart Agricultural Assistance Chatbot for Farmers

69. Intelligent Medical Assistance Chatbot Using Artificial Intelligence

70. College Admission Chatbot

Agriculture based Projects

71. AI-Powered Crop Disease Detection, Severity Assessment and Treatment

Recommendation Using YOLO11 & MobileNetV2

72. Crop Pest Detection and Fertilizer Recommendation System for Smart Agriculture

73. A Novel Rice Leaf Disease Detection and Remedies using Deep Learning

74. Sugarcane Leaf Disease Detection and Treatment Recommendation Using Artificial

Intelligence



75. Crop Yield Prediction Using Machine Learning for Smart Agriculture
76. A Machine Learning-based Approach for Crop Yield Prediction and Fertilizer Recommendation
77. InteliCrop: An Ensemble Model to Predict Crop using Machine Learning Algorithms
78. Agricultural Crop Recommendations based on Productivity and Season
79. Crop Recommender System Using Machine Learning Approach
80. Crop Yield Prediction based on Indian Agriculture using Machine Learning
81. Edible and Poisonous Mushrooms Classification by Machine Learning Algorithms
82. Disease Classification in Wheat from Images Using CNN
83. Plant Disease Detection and Classification Using Machine Learning Algorithm
84. Rice Leaf Disease Prediction Using Machine Learning
85. Soil Analysis and Crop Recommendation using Machine Learning
86. Potato Disease Detection Using Machine Learning
87. Tomato Leaf Disease Identification by Restructured Deep Residual Dense Network
88. Rice Leaf Diseases Classification Using CNN With Transfer Learning
89. Predicting Agriculture Using Machine Learning
90. Rice Leaf Disease Detection using Efficientnet
91. Apple Fruit Disease Detection using Deep Learning
92. Plant Disease Detection using Deep Learning and Fertilizer Recommendation
93. Rice Varieties Identification using Deep Learning
94. Real-Time Fruit Classification using Deep Learning via Web Interface for Automated Harvesting Applications
95. AI-Powered Cattle Breed Recognition Using Deep Learning
96. Fruit Quality Detection using Deep Learning for Rotten and Fresh Fruits Classification



97. Smart Agriculture with AI for Crop Recommendation using Weather and Soil Content

Healthcare & Medical

98. Vitamin Deficiency Detection and Risk Assessment Using Deep Neural Networks

99. Intelligent Visual Pill Identification Using YOLO-Based Deep Learning

100. Blood Cancer Detection and Classification Using Deep Learning and
Microscopic Blood Cell Image Analysis

101. Respiratory Disease Detection Using Cough Sound Analysis

102. Facial Skin Analysis and Skincare Product Recommendation Using Machine
Learning

103. Automated Detection of Diabetic Foot Ulcers and Multi-Level Severity
Grading Using an Intelligent Deep Learning Framework

104. Diabetes Prediction Using Machine Learning for Early Risk Assessment with
Explainable AI

105. Chronic Kidney Disease Prediction Using Machine Learning with Explainable
AI

106. Eye Disease Detection and Classification Using Deep Learning from Retinal
Images

107. Heart Failure Prediction using Machine Learning

108. Self-Reliant Medical Chatbot Using Machine Learning for Smart Intent
Classification

109. Detection of Autism Spectrum Disorder in Children and Adults Using
Machine Learning Techniques

110. Smart Diabetes Prediction System Using Machine Learning Algorithms

111. Drug Recommendation System in Medical Emergencies using Machine
Learning



112. A Machine Learning Framework for Early-Stage Detection of Autism Spectrum Disorders
113. A Machine Learning Model to Predict a Diagnosis of Brain Stroke
114. Obesity Risk Prediction using Machine Learning
115. Heart Disease Prediction with Machine Learning
116. A Deep Prediction of Chronic Kidney Disease by Employing Machine Learning Method
117. Efficient Thyroid Disease Prediction using Features Selection and Meta-Classifiers
118. Heart Disease Prediction using Machine Learning and Data Analytics Approach
119. Liver disease prediction using Ensemble Technique
120. Prediction of Parkinson's disease using XGBoost
121. Chronic Kidney Disease Stage Identification in HIV Infected Patients using Machine Learning
122. Diabetes Disease Prediction Using Machine Learning Algorithms
123. Machine Learning Based Heart Disease Prediction System
124. Naive Bayes Classifier for Predicting the Novel Coronavirus
125. Primary Stage of Diabetes Prediction using Machine Learning Approaches
126. A Machine Learning Methodology for Diagnosing Chronic Kidney Disease
127. Drug Recommendation System based on Sentiment Analysis of Drug Reviews using Machine Learning
128. COVID-19 Future Forecasting Using Supervised Machine Learning Models
129. Heart Disease Identification Method Using Machine Learning Classification in E-Healthcare



130. Prediction of Breast Cancer, Comparative Review of Machine Learning Techniques, and Their Analysis
131. Blood Pressure Prediction using Machine Learning
132. Skin Lesion Analysis towards Melanoma Detection Using Deep Learning Network
133. Lung Cancer Detection Using CNN
134. Malaria Detection in Blood Smear Images using Deep Learning
135. Automated Detection of Diabetic Foot Ulcers and Multi-Level Severity Grading Using an Intelligent Deep Learning Framework
136. Bone Fracture Detection using Deep Learning
137. Enhanced Skin Disease Detection and Classification using Deep Learning
138. Detection of Malnutrition in Children Through Visual Diagnosis of Pediatric Images Using Deep Learning
139. Advanced Breast Cancer Detection using Deep Learning from Mammogram and Histopathological Images
140. AI-Powered Alzheimer's Disease Detection using Deep Learning
141. Advanced Brain Tumor Detection in MRI Images using Deep Learning
142. Lung Cancer Detection and Classification using Deep Learning
143. Efficient Detection of Diabetic Retinopathy through Deep Learning
144. Brain Stroke Detection System based on CT images using Deep Learning
145. Oral Cancer Detection using Deep Learning
146. Deep Learning based Blood Group Detection using Fingerprint
147. Enhanced Breast Cancer Diagnosis Using Machine Learning on Patient Data and Deep Learning



148. Automated Knee Osteoarthritis Prediction and Classification from X-ray Images Using Deep Learning
149. Cervical Cancer Prediction and Classification Using Deep Learning on Medical Image Data
150. Blood Cancer Identification using Hybrid Ensemble Deep Learning Technique
151. Breast Cancer Classification using CNN with Transfer Learning Models
152. Detection and Identification of Pills using Machine Learning Models
153. Detection of Cardiovascular Diseases in ECG Images Using Machine Learning and Deep Learning Methods
154. Kidney Cancer Detection using Deep Learning Models
155. Medicinal Herbs Identification
156. Monkeypox Diagnosis with Interpretable Deep Learning
157. Pancreatic Cancer Classification using Deep Learning
158. Prediction of Lung Cancer using Convolution Neural Networks
159. Skin Cancer Prediction Using Deep Learning Techniques
160. Detection of Lungs Cancer through Computed Tomographic Images using Deep Learning
161. A Contemporary Technique for Lung Disease Prediction using Deep Learning
162. Parkinson's Disease Detection Using Machine Learning
163. Pneumonia Detection using Deep Learning
164. Brain Tumour Detection Using Deep Learning
165. Classification of Malaria-Infected Cells using Convolutional Neural Networks
166. Diabetic Retinopathy Detection by means of Deep Learning
167. Diagnosis of COVID-19 from Chest X-Ray Images Using Wavelets-Based Depthwise Convolution Network



- 168. Melanoma Detection Using Convolutional Neural Network
- 169. Artificial Intelligence and COVID-19: Deep Learning Approaches for
Diagnosis and Treatment
- 170. Malaria Detection using Deep Learning
- 171. Machine Learning-Based Respiratory Disease Classification Using Lung
Sounds

Disaster Management

- 172. Real-Time Flood Prediction and Landslide Risk Assessment Using Machine
Learning
- 173. Real-Time Fire and Smoke Detection and Alert System using Deep Learning
- 174. Road Accident Detection Using Machine Learning
- 175. Water Quality Prediction Using Machine Learning for Drinking Water Safety
Assessment
- 176. Real-Time Road Damage Detection and Classification Using Deep Learning
- 177. Intelligent Weapon Detection System for Real Time Surveillance using Deep
Learning with YOLOv8
- 178. Forest Fire Detection using Convolutional Neural Networks (CNN)
- 179. A Mask Detection Method for Shoppers Under the Threat of COVID-19
Coronavirus

Intelligent Transportation Systems

- 180. Intelligent Traffic Management System using Machine Learning
- 181. Vehicle Speed Detection and Monitoring Using Deep Learning
- 182. Helmet Violation Detection for Traffic Monitoring Using Deep Learning
- 183. Smart Car Parking Space Detection and Availability Monitoring Using Deep
Learning



184. Real-Time Traffic Sign Detection and Recognition Using Deep Learning
185. Road Pothole Detection using Deep Learning
186. Traffic Accident Risk Prediction Using Machine Learning
187. A Road Accident Prediction Model Using Data Mining Techniques
188. Traffic Prediction using Machine Learning
189. Speed Bump Detection for Enhanced Driving Safety using Deep Learning
190. Helmet and Number Plate Detection using Deep Learning
191. Traffic Sign Classification using Deep Learning
192. Traffic Sign Board Recognition and Voice Alert System using Convolutional Neural Network
193. Deep Learning for Large-Scale Traffic-Sign Detection and Recognition
194. Vehicle Speed Detection using OpenCV and Python
195. A System for Automated Vehicle Damage Localization and Severity Estimation Using Deep Learning
196. Flight Delay Prediction Based on Aviation Big Data and Machine Learning
197. Real-Time Drowsiness Identification based on Eye State Analysis
198. License Plate Detection Methods Based on OpenCV

Educational & Academic ML, Data Science

199. AI-Powered Smart Attendance System Using Face Recognition
200. AI-Powered Personalized Scholarship and Government Scheme Recommendation System
201. Student Skill Gap Analysis, Placement Prediction and Career Guidance using Machine Learning
202. Automated Handwritten Subjective Exam Answer Sheet Evaluation System
203. Student Performance Prediction using Machine Learning



- 204. Academic Performance Prediction Based on Multisource, Multifeature Behavioral Data
- 205. Performance Analysis on Student Feedback using Machine Learning Algorithms
- 206. Students Performance Prediction in Online Courses Using Machine Learning Algorithms
- 207. Performance Analysis on Students Feedback for Faculty using LSTM Algorithm

Computer Vision (CV) / Digital Forensics

- 208. Detection of AI-Generated Handwriting and Human Handwriting Using Hybrid Deep Learning
- 209. Signature Forgery Detection using Deep Learning
- 210. Doctors' Handwritten Medical Prescription Recognition and Digital Conversion Using AI
- 211. AI-Driven Citizen Complaint Management System
- 212. AI-Based Garbage Classification and Smart Waste Segregation Using Deep Learning
- 213. Yoga Pose Detection using Deep Learning
- 214. Deep Learning-Based Dual-Modal Bird Species Identification Using Audio and Images
- 215. Dog Breed Classification using Inception-ResNet-V2
- 216. Automated Bird Species Identification using Audio Signal Processing and Neural Network
- 217. Dog Breed Classification using Deep Learning
- 218. Bird Species Identification Using Deep Learning



- 219. Calorie Estimation of Food and Beverages using Deep Learning
- 220. Fine-Grained Food Classification Methods on the UEC FOOD-100 Database
- 221. Development of Hybrid Image Caption Generation Method using Deep Learning
- 222. Identification of Fake Indian Currency using Convolutional Neural Network
- 223. Handwritten Digit Recognition Using CNN
- 224. Handwritten Character recognition and Digit Recognition using Deep Learning
- 225. Mouse Cursor Control using Eye Movements
- 226. Real-Time Hand Gesture Detection for Sign Language Recognition using Python
- 227. Virtual Trial Room for Online Shopping
- 228. Virtual Mouse using Hand Gesture Recognition
- 229. A Lightweight Convolutional Neural Network for Real-Time Facial Expression Detection
- 230. Face Recognition based Attendance System using Machine Learning
- 231. Real time Facial expression recognition in Python | Facial Emotion Detection
- 232. Real Time Facial Expression Based Smart Music Player

Data Science

- 233. Intelligent Loan Eligibility Prediction Using Machine Learning and Data Analytics
- 234. Intelligent Stock Price Prediction Using Machine Learning
- 235. Optimized Electricity Bill Prediction Using Machine Learning Techniques
- 236. Electric Vehicle (EV) Price Prediction using Machine Learning



- 237. Health Insurance Price Prediction using Machine Learning
- 238. CO2 Emission Rating by Vehicles Using Data Science
- 239. Efficient Machine Learning Algorithm for Future Gold Price Prediction
- 240. House Price Prediction using Machine Learning Algorithm
- 241. Predicting Stock Market Trends Using Machine Learning and Deep Learning Algorithms Via Continuous and Binary Data; a Comparative Analysis
- 242. Prediction Of Used Car Prices Using Artificial Neural Networks And Machine Learning
- 243. Predictive Analysis for Big Mart Sales Using Machine Learning Algorithms
- 244. Prediction of Modernized Loan Approval System Based on Machine Learning Approach
- 245. A Study on a Car Insurance Purchase Prediction Using Machine Learning
- 246. Machine Learning based Employee Attrition Prediction and Layoff Prediction System
- 247. Employee Salary Prediction using Machine Learning
- 248. Customer Churn Prediction using Machine Learning
- 249. Real Estate Price Prediction using Machine Learning
- 250. Bitcoin Price Prediction using Machine Learning

Behavioural Analytics, Psychology

- 251. Sleep Disorder Prediction Using Machine Learning
- 252. Human Stress Detection Based on Sleeping Habits Using Machine Learning Algorithms
- 253. Machine Learning based Stress Detection Using Multimodal Physiological Data



- 254. Smartphone Addiction Prediction Using Machine Learning
- 255. Finding Psychological Instability Using Machine Learning
- 256. Hybrid Feature based Prediction of Suicide Related Activity on Twitter
- 257. Analysis and Prediction of Suicide Attempts
- 258. A Comprehensive Study on Social Network Mental Disorders Detection via Online Social Media Mining
- 259. Mental Stress Detection in University Students using Machine Learning Algorithm
- 260. Detection of Stress in IT Employees using Machine Learning Technique

Social Media Analytics

- 261. Detection of Cyberbullying Using Machine Learning and Deep Learning Algorithms
- 262. Toxic Speech Classification using Machine Learning Algorithms
- 263. Detection of Cyberbullying on social media Using Machine learning
- 264. Detecting A Twitter Cyberbullying Using Machine Learning
- 265. Deep Learning Based Fusion Approach for Hate Speech Detection
- 266. A Systematic Review of Predicting Elections Based on Social Media Data
- 267. COVIDSenti: A Large-Scale Benchmark Twitter Data Set for COVID-19 Sentiment Analysis
- 268. Emotion Recognition by Textual Tweets Classification Using Voting Classifier (LR-SGD)
- 269. Detecting and Characterizing Extremist Reviewer Groups in Online Product Reviews



- 270. A Machine Learning Based Approach for Wine Quality Prediction
- 271. Air Quality Prediction Based on Machine Learning
- 272. Water Quality Classification Using SVM And XGBoost Method

Audio Processing

- 273. Multilingual Speech-to-Text System
- 274. Music Genre Classification Using Convolutional Neural Network
- 275. Speech Emotion Recognition using Machine Learning

For updated project titles visit:

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Project Deliverables:

- 1) Complete Source Code with Dataset.
- 2) Final Report / Document (The Document which we provide is PLAGIARIZED DOCUMENT ONLY, which means that it's not a Unique content. The Documents are with BASIC CONTENTS ONLY, COPIED/TAKEN FROM IEEE PAPER / INTERNET SOURCES. You need to customize it according to your college requirements)

(Document consists of basic contents of about Abstract, Bibliography/References, Conclusion, Implementation (Modules & Modules



Description), I/P & O/P Design, Introduction, Literature Survey, Organization Profile, Screen Shots, Software Environment, System Analysis, System Design, System Specification, System Study, System Testing)

(The chapter System Design consists of 5 diagrams: Data Flow, Use Case, Sequence, Class, and Activity Diagram)

3) One Review PPT.

4) Software Links required for Installation with How to Install Video. We provide one time execution support in your PC / Laptop.

5) "How to run" execution help file.

6) IEEE Base Paper (PDF).

Note: Research paper writing is also available but additional cost according to the Journal type / Conference type according your selection of International Journal or International Conference or IEEE Conference or Scopus Publication.

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