Suggested List of Mini Projects

CSM 301 Mini Project B 01

CSM 401 Mini Project B 02

Following project titles/domains may be used to create ones own curated list of Mini Project Titles with varied scope and implementation

Health Care (ML/IP/IoT/Cloud/Analytics/Mobile App)

1. Tumor/ Cancer detection from MRI images
2. Organ Segmentation and Labelling in MRI Images
3. Blood flow detection and monitoring using Sensory data
4. Recommendation of doctors and medicines using review mining
5. Design and Implementation of prediction for Medical Insurance
6. Activity monitoring and unusual activity detection for elderly homes
7. Recognizing exercises for physiotherapy videos
8. Personalized Treatment based on Patient History
9. Real-time health monitoring using wearable devices and cloud analytics
10. Generic Medicine Mobile App development

Agriculture (IP/CNN/ERP/ADBMS,Mobile App,…)

11. Plant disease identification using leaf images CNN
12. Weed plant detection from agricultural field images
13. Predicting yield, soil moisture and weather using images processing
14. Plant Gene Classification and Functionality Prediction
15. Automated quality assessment of crops
16. Fruits counting for automatic inventory management
17. E-Krishi, MultiLingual app for farmers
18. Location based pricing management for Krishi Bazaar (Bidding/Auction)

Smart Cities :(IoT, Cloud and Analytics)

19. Change detection for deforestation, water reserves from Satellite images
20. Traffic Behaviour (parking, highway, Rail, Air..) and Risk Management

21. IoT based applications for smart homes, smart meters, smart
22. IoT based Water Monitoring (Temperature, Pressure monitoring systems)
23. Smart Plant Irrigation System using IoT
24. IoT in Health, Pharma, education
25. Sale of Real estate/Flood prediction/Air quality/Geographical crime rate Prediction Tools

Robotics and Drones

26. Detection of Unmanned Vehicles (UMV) and Drones
27. Understanding and implementing API for ROS
28. Wifi controlled Robots
29. Obstacle Avoidance for Drones
30. Integrating various sensors for autonomous drones
31. Swarm Intelligence for Drones (simulation)

Cyber Security (CSS,ML, ADBMS, SDN)

32. Intrusion detection in networks and servers
33. Malware identification using deep learning
34. Anomaly detection in network activities
35. Virus/Malicious file detection in a shared environment
36. Spam SMS filtering Using Machine Learning
37. Firewall in software Defined Network
38. Integrating SDN on cloud
39. Blockchain based Land Mining records (E-gov Projects)
40. Blockchain usage in Supply Chain Management

Education (ML, NLP, NLU, Semantic Web...)

41. Predicting Student Performance using Regression analysis
42. Automatic scientific article summarization
43. Feature based opinion mining on student feedback
44. Face recognition based attendance system
45. Semantic Web based content Generation
46. NLP based Teaching Learning Tools
47. ChatBot based Test assessment Tool

Video Processing and Multimedia

48. Human activity detection for surveillance video Compression
49. Gesture recognition for Human Computer Interaction
50. Real-time video to text transcription for visually challenged person
51. Real-time speech recognition for regional languages
52. Real-time OCR for Regional Languages
53. Face Recognition & expression recognition Mobile App for Visually impaired person
54. 3D Reconstruction
55. Visualization tool integration with analytics
56. Action recognition for controlling electronic appliances in homes
57. Place recognition app for visually impaired person
58. Text to video generation for News Stories

Social Media Analytics and Digital Marketing

59. Customer requirement analysis using User Generated Content
60. Consumer behavior analysis using User Generated Content
61. Terrorism detection from social media
62. Stock prediction using Twitter sentiment analysis
63. Restaurant Review Classification And Recommender System
64. Fake news detection in online social media
65. Search engine Optimization
66. Use Google Analytics and Tableau tools for Marketing statistics
67. Building E-commerce Web site complete with supporting all digital marketing components such as social Media connect, Blogs, email Marketing, Chat Bot, SEM, SEO

Games (android OS and iOS) and Virtual reality

68. Massively Multiplayer Online
69. Real-Time Strategy (RTS)
70. Single player games

User experience design

71. Design a Mobile App accessibility standards
72. Design and implement a game complete with Sound and UX Studio Design Library
73. Interactive Game Development

Project Management/ DevOps:

74. Use Project Management Tools (like Wrike) to manage your project for User Research Usability Evaluation, User Interface Design, Interaction Design and Visual Design for a E-book Store for 5-7 year old.

Using DevOps Tools (Jenkins, Ansible, Chef, Puppet, Vagrant, & SaltStack) demonstrate following:

75. To build Knowledge Sharing (KS) Apps to demonstrate Distributed/Agile Teamwork
76. Elastic Cloud Server Orchestration for Web/Mobile App Development
77. Source Control Management (SCM) & Version Control Systems (VCS)
78. Distributed Programming Team Collaboration Tools & Chat Apps
79. Web/Mobile Application Lifecycle Management Applications using SAAS Application.
80. Demonstrate Business Intelligence/ Monitoring/Analytics

Miscellaneous

81. Explore Kubernetes, Open stack, Docker for PAAS, IAAS deployment.
82. CPU-GPU (Cuda Programming Projects): Encryption algorithms
83. Demonstrate MPI based load balancing for a cluster.
84. Demonstrate Consistency management protocols for distributed file system