



## VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

An Autonomous, ISO 9001:2015 & QS I-Gauge Diamond Rated Institute, Accredited by NAAC with 'A++' Grade  
NBA Accreditation for B.Tech. CE,EEE,ME,ECE,CSE,EIE,IT,AME, M.Tech. STRE, PE, AMS, SWE Programmes  
Approved by AICTE, New Delhi, Affiliated to JNTUH, NIRF (2023) Rank band:101-150 in Engineering Category  
College with Potential for Excellence by UGC,JNTUH-Recognized Research Centres:CE,EEE,ME,ECE,CSE Vignana Jyothi  
Nagar, Pragathi Nagar, Nizampet (S.O.), Hyderabad – 500 090, TS, India.  
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### Granted Patents (40)

S.no	Patents title
1.	A system for analyzing risk associated with cough sounds
2.	Stabilizing device
3.	Fabrication of eco-friendly organic ferroelectric diiso-propylammonium bromide films
4.	A process of preparing activated deoiled cakes of karanja for treatment of textile wastewater
5.	Development of megawatt wind turbine for optimal management of smart agricultural farms
6.	An intelligent and intuitive signaling system for motor vehicles to minimize road accidents
7.	System and method for diagnosis of diseases from medical images
8.	Machinelearning based network intelligentization for automatically configurable cellular communication systems
9.	An iot based lpg cylinder warehouse monitoring system along with bookkeeping of refilling of cylinders
10.	An apparatus and method for remotely monitoring an aquatic animal and classification thereof
11.	Elism- quantum computing: extremely large databases store into a small memory using quantum computing
12.	An automated thermal scanner with speech recorder and an alert system to avoid the touch thereof
13.	A smart and automated bedridden patient monitoring system over the cloud
14.	Automated real – time driving behavioral modeling analysis and reporting in denser traffic using data mining
15.	Collaborative federative learning approach for internet of vehicles traffic prediction
16.	Non-contact nanostructure and method of manufacturing the same for fouling free solar desalination
17.	lot based smart electrical power plug
18.	System and method to generate time-profiled temporal pattern tree
19.	System and method for diagnosis of diseases from medical images
20.	Recovery process of metals from printed circuit boards (pcbs) using <i>n. Bacteria</i> .

21.	Air-conditioned helmet
22.	A dc-to-dc converter configuration by soft switching devices
23.	Automatic airlock prevention system and method thereof
24.	An integrated computing system and a process to generate the driver safety index for preventing automobile accidents
25.	A wire-less system to reliably control a large network of street lighting systems from a central location through fm broadcast
26.	Fabrication of polymer based nano composite roof sheets
27.	Recovery process of metals from printed circuit boards (pcbs) using thiobacillus novellus
28.	Recovery process of metals from printed circuit boards (pcbs) using acidithiobacillus ferrooxidans bacteria
29.	Multi-branch resonant converter Based dc power supply for diversified applications
30.	Device and method to measure active earth pressure of back-to-back mechanically stabilized earth walls
31.	Steam dish washer
32.	Ai based prediction model, method for the compressive strength of geopolymers concrete
33.	Salt tolerance monitoring system
34.	Method and system for soil classification
35.	Eco-friendly solar desalinators
36.	Piled embankment reinforcement systems
37.	Dic based rapid condition assessment system for structural health monitoring using qr code based speckle pattern
38.	Method and circuit for operating oewim using dual inverter fed with modulated carrier based dpwm
39.	System for mitigating circulating current in type modular multilevel converter (mmc)
40.	An apparatus for making a flat edible food



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## Patents at various stages

S.no.	Patents title
1	Method for histopathological image analysis using vagrant for early detection of cancer
2	Semantic knowledge base intelligent system for problem solving skills enhancement
3	Multi-layered gravity filter for treatment of rainfall muddy water
4	Knowledge-based method to recommend suitable crops for soils with identified nutrient deficiencies
5	Reactive power design for delta connected capacitor bank to self-excited asynchronous generator
6	Efficient prime bit Vedic multiplier for double precision floating point numbers
7	Knowledge-based intelligent system for design thinking
8	Heat absorber for solar desalination
9	Floating absorber for solar still
10	Real-time health and environment monitoring system for underground coal mining workers
11	Patient obligation perceiving system using eye gestures
12	Child safety lock for scooter throttle
13	Quick set non-cement brick
14	A technique for edge identification in individual silicon crystal semiconductors using adaptive inpainting
15	Implementation of machine learning and data science in the process of making financial decision
16	An investigation on the use of artificial intelligence for performance enhancement of phase change material for a smart control solar application
17	Nano-porous structure fabricated through anodization and copper electroplating for enhanced solar desalination
18	System and model for intelligent content rating estimation using machine learning
19	Unlocking the secrets of micro plastic emissions from sewage plants with methodological analysis
20	Gps and encryption based multi-check authentication process for preventing fraud transaction
21	Fluid dynamic melted aluminum refinement in a designed furnace through a mathematical model
22	Method for prediction of embankment failure on soft fossils
23	Method for prediction of angina pectoris based on the user input or dataset

24	coupled inductor-based dc-dc boost converter
25	Solar powered desalination system
26	Intrusion detection and analysis system in local networks using machine learning.
27	AI and IoT based miniature circuit breaker
28	Healthcare support management system using the IoT-based blockchain platform.
29	Multi-tasking horticulture vehicle
30	Ferroelectric bridge junction device with computational modelling and synaptic features
31	Drill cabin system for safe driving
32	AI and NLP system for automatic generation of multilingual minutes of the meeting
33	A phase change dynamics-based system for additive manufacturing and development of alloys
34	Solar desalination system using CO <sub>2</sub> -MWCNT hybrid nanofluid
35	Security system for women safety and real-time monitoring
36	AI based device to prevent early cervical spondylosis among computer users
37	OCR and deep learning-based plagiarism detection device for Telugu language
38	Crop recommendation and disease prediction system
39	A design for feature selection and optimized hyperparameter tuning for machine learning model
40	Improved distillate using cerium oxide nanofluid in solar-powered desalination
41	Artificial intelligence-based analysis of smart agriculture system using embedded IoT
42	Design automation of CMOS analog circuits using SCA-MGWO algorithm
43	Deep learning-based agriculture robot
44	A restorative remedial solution for leaf disease detection using convolutional neural networks
45	Wi-Fi-enabled anti-theft system with biometric authentication in fuel-filling stations
46	IoT-based RO water purifier with auto TDS control
47	Detecting schizophrenia using deep learning techniques (LSTM and CNN from social media)
48	Automated online proctoring system to monitor anomalous student behavior using Attentive-Net and Proctor-Net
49	Artificial intelligence-based approach to predict the statistical impact of influencers for expanding client base through influencer marketing tactics
50	A system and method for secured architecture with effective data sharing in cloud based big data storage environment
51	Design automation of CMOS analog circuits using SCA-MGWO algorithm
52	Using corporate organization analyzing the usefulness of business reengineering as a strategic tool for the survival
53	Molecular hybrids of pyrazolo[3,4-b]pyridine and triazole having anti-bacterial activity

54	Fuzzy neural optimised fuzzy logic controller based dynamic voltage restorer for power quality improvement with non-linear
55	Use of magnetic spinel ferrite nanoparticles (sfnp) in green chemistry to produce complex oxides
56	Chunk based prediction
57	Iot based heart disease prediction using deep neural network
58	Artificial intelligence-based technique to analyze the genome sequence of cancer patients and predict their life expectancy based on cell biology
59	A machine learning based approach to plot graphs based on statistical data. Analysis of patients suffering from cancer due to alcohol consumption
60	A machine learning approach for iot device identification based on network traffic analysis and method thereof
61	Attributional thoughts of English teaching master's pupils on the reading performance
62	A method for division of lithium battery microstructure strengthened with artificial electrodes by deep learning
63	System and method of intelligent coffee vending machine
64	An approach for solving differential equations and variational problems based on python Elvet nn system
65	Iot based smart material for ev segment using wire electrical discharge machining thereof
66	Method and implementation for mitigating voltage sag and swell in distributed system with under voltage/ over voltage relay based compensators
67	A novel machine learning tool and approach / method for Telugu dependency parsing using combinatory categorical grammar
68	Gps and encryption based multi-check authentication process for preventing fraud transaction
69	A novel facts (flexible alternating current transmission systems) device "gate turn off thyristor controlled static shunt compensator" (gcssc) to enhance power system stability and power transfer capability of both transmission and distribution systems
70	Development of bismuth borate glasses co-doped with small concentrations of manganese oxide and zirconium oxide nanoparticles suitable for luminescent materials
71	Optical parameters of gallium nitride doped ferrite polypyrrole nanocomposites
72	Deep learning enabled multi-class plant disease detection model based on computer vision
73	A system based on big data analytics for hr management and staffing projects of an organization
74	Tpm- crowdfunding: trusted crowdfunding platform using a smart contract and ai- based management system
75	An artificial intelligence (ai) and internet of things (iot) based integrated approach for covid-19 prevention
76	Submerged nanoporous micro hotspot structure for solar desalination and method of preparation
77	Intelligent caregiver wireless monitor and motion sensor for safe home system applicable for elderly people
78	A series capacitive compensation technique with design based iterative algorithm for mitigation of ferranti effect in ehv and uhv power transmission systems
79	Mathematical modeling and internet of things-based patient health monitoring system
80	An algorithm based on deep learning for the detection of covid-19 infections
81	Prediction of diseases in vegetables using machine learning algorithm
82	Tuberculosis detection using artificial intelligence (ai)
83	Iot, machine learning based intelligent intrusion detection systems for detecting cyber threats

<b>84</b>	The block chain technology to protect data access using a smart contract mechanism
<b>85</b>	Method for the synthesis of mixed metal nanoscale composites using low-cost precursors
<b>86</b>	User friendly new trend material for solar cell applications with low cost
<b>87</b>	Advanced non-centric pwm (pulse width modulated) method to eliminate common mode voltage in dual inverter fed open-end induction motor drives
<b>88</b>	Method for providing a multi directional theft monitoring system for tracking vehicles and alerting owners in real-time
<b>89</b>	Deep learning based covid finding using densenet in computerized tomography (ct) scan.
<b>90</b>	Design and fabrication of tread mill bicycle
<b>91</b>	Diagnosis and management of covid-19 using artificial intelligence.
<b>92</b>	Method and system for predicting breast cancer disease using data mining and deep learning techniques
<b>93</b>	Nanorobotics for medical applications using nems and mems
<b>94</b>	Two-temperature magneto-thermoelasticity for heat conductivity
<b>95</b>	Intelligent wearable brain machine interface to assist paralyzed people
<b>96</b>	Design and modelling of diesel particulate filter to reduce the emissions from ci engine
<b>97</b>	Device for connecting computers
<b>98</b>	Gps live vehicle tracking and speed control
<b>99</b>	An air gesture-based system for communicating between multiple iot device
<b>100</b>	A proficient method for categorical data clustering
<b>101</b>	Iml- traffic prediction: intelligent traffic prediction using machine learning.
<b>102</b>	Abie-voting system: aadhaar and blockchain intelligent electronic voting system
<b>103</b>	Cloud sharing system: cloud computing information sharing system in real time
<b>104</b>	Fake news analysis using machine learning and updateable neural analysis
<b>105</b>	Sheltered driving system for automotive vehicles for streamlined operation on roads with adherence to extant rules and regulations
<b>106</b>	Hotspot prediction system for covid-19 pandemic
<b>107</b>	Iuml-stock prices predictor: intelligent stock prices predictor using machine learning.
<b>108</b>	Icdn- object detection system: intelligent object detection system with image classification and deep neural networks.
<b>109</b>	Asp: crime site analysis: automatic method and process of performing crime site analysis and management system.
<b>110</b>	Transparent and user-friendly billing system, method, and process towards smart governance
<b>111</b>	Aws-cloud data performance increased using machine programming.
<b>112</b>	A novel security framework integrated with lms for software security
<b>113</b>	Self - excited synchronous generator (sesg) without d.c excitation

114	Motorized ankle foot driven customized prosthetic leg with exoskeleton
115	Design & development of an intelligent system to analyze the impact of covid-19 on respiratory system using machine learning
116	Method for characterization of a subject's attention and mediation using brain computer interface for real time healthcare monitoring
117	Virtual mom responsive baby monitoring toy
118	An arrangement to enhance the tissue engineering and other lively processes to enhance life
119	Evaluation of thrust force and torque in drilling of natural fiber particle reinforced polymer.
120	Deep learning-based detection of abnormality scenarios for computer vision based har systems
121	Design and analysis of rf mems switch configured csrr embedded bandstop filter for ku band applications
122	Friction stir spot weldments using different tools materials by taper thread profile en 31 and en 19 on dissimilar metals
123	Recovery process of metals from printed circuit boards (pcbs) using acidiphilum acid ophilum bacteria
124	Geo composite liner systems
125	Design for earthquake load modelling using critical excitation method
126	Brain computer interface (bci) based system and method for characterizing behavior state of a subject
127	A system and method of planting and breeding-based internet of things with cloud service and service flow method in agriculture
128	Vigyra: a novel integral system for precision agriculture
129	Computer cache memory performance enhance using neural networks and machine learning
130	Electric power is generated by using the thermal energy of an exhaust gas in a crematory
131	Critical patients' monitoring device: critical patients 'monitoring using machine learning feature selection technique
132	Cloud attenuation system and method to provide cloud attenuation statistics and atmospheric absorption coefficient
133	Dart (depression and related tracker): identification system to find and prevent depression tendencies of women
134	Recovery process of metals from printed circuit boards (pcbs) using acidithiobacillusthiooxidans bacteria.
135	Development of smart walking stick for visually impaired people
136	Ipsd-system: internal smart pollution control display system.
137	Horizontal axis, camguided, telescopic blade, yaw controlled wind mill
138	P-button: panic button provides information through light, radio signal and other required signal
139	Cloud parking management system and vehicle anti-theft method
140	An arrangement to increase the level of liquids
141	An apparatus for making a flat edible food
142	Fuel indicator and global fuel pump detection system
143	A novel pixel based method for satellite image classification

<b>144</b>	Iot-traffic system: iot based intelligent traffic, transport management system
<b>145</b>	Instrumented methods for smart operations
<b>146</b>	System and method for generating magnetic power and converting into an alternative energy.
<b>147</b>	A passive filter configuration to reduce the produced by non-linear loads