

MECHANICAL & MECHATRONICS PROJECTS

- Ninety degree turning steering mechanism-four wheeler
- Vehicle's four-wheel drive system with automatically-engaging clutch
- Differential locking and unlocking of vehicle's routine control system
- Motion States Recognition System Based on Automatic Door Management
- Pneumatic punching and Riveting System using Remote Monitoring and Control
- Automatic pneumatic shaping machine for industries
- Robust Optimization on Automotive Steering Mechanism with Clearances for four wheeler
- Automatic smart faucet for water conservation
- Automatic Compressed air production using vehicle suspension
- Design and fabrication of Electrical power generation using railway track
- Design and fabrication of Electrical power generation using speed breaker
- Fabrication of Automatic Pneumatic Chapatti making machine
- Implementation of Electro-Pneumatic speed control system for automation
- Foot step power generation system for rural energy application to run AC and DC loads
- Pneumatic control for robotics and industrial automation
- Fabrication of Hydraulic Cylinder Liner Puller
- Fabrication of lathe coolant pump with fitting arrangement system
- Productivity Improvement on a CNC Lathe by Automatic Loading and Unloading of Throttle Valve Component
- Compact pedal operated battery charger for mobile phones
- Fabrication of Pneumatic sticker making machine
- Remote monitoring control of auto feed Riveting System
- Automation of pneumatic sheet metal bending machine
- Gear shifting device of a pneumatic transmission for motor vehicle
- Fabrication of Pneumatic bending and bend removing machine
- Design and development of Smart Pneumatic cutting machine
- Automatic pneumatic spring end grinding machine
- Advanced Safety Pneumatic disc break for vehicles
- Pneumatic four-axis material handling equipment

- Effective PVC pipe non-dust feeding and cutting machine
- Sensor operated auto feed punching machine
- Small power three phase induction motors for conveyor automation
- Energy saving by using newly designed automated solar powered evaporative air cooler (ASPEAC)
- Improvement of Solar based Energy saving air Dryer
- Mechatronic extension of special purpose tapping machine
- Modeling and control of Tapping attachment in radial drilling machine
- Hydro-Electric Water turbine power generation system
- Solar agricultural water pumping system with auto tracking
- Fabrication of solar powered automobile air cooler
- Mini - Hydraulic jack pressing machine for industrial automation
- Fabrication of hydraulic zigzag bending machine
- Fabrication of sheet metal cutting machine for industries
- Design and fabrication of Sensor operated pneumatic vice
- Fabrication of pneumatic operated reciprocating pump
- Fabrication automatic water pumping system using windmill
- Automatic motorized power hack saw for cutting application
- Fabrication of waste chip and coolant filtration system
- Fabrication of automatic zigzags pneumatic lift
- wireless remote control operated screw jack
- Design and Fabrication of anti-lock breaking system
- Effective Compressed air production using speed breaker
- Automatic temperature controller with cooling system
- Advanced Automatic clutch and break system for four wheeler
- Fabrication of air operated automatic pneumatic jack
- Highway high speed indication and automatic pneumatic breaking system
- Fabrication of pedal operated dress washing machine
- Gear mechanism using Electricity generation from speed breaker
- Compressed air production using vehicle suspension
- Auto side stand indicator and center stand for two wheeler

- Intelligent reverse breaking system for four wheeler
- Anti theft wheel locking system for four wheeler
- Fabrication of automatic pneumatic bumper for two wheeler
- Design and fabrication of robotic arm and gripper
- Fabrication of pick and place robot for material handling
- Auto indexing gear cutting attachment for pneumatic shaping machine
- Automatic pneumatic multi-purpose press
- Fabrication of pneumatic quick return mechanism
- Fabrication in automatic multi-speed gear box
- Fabrication of mini milling machine for manufacturing industries
- Design and Fabrication of magnetic coolant filter for chip collection
- Fabrication automatic hydraulic vice with power pack
- Fabrication and design of pneumatic injection molding machine
- Hydraulic bearing puller for automobile industries
- Effective bearing puller for pneumatic bearing press
- Air operated automatic plate bending machine
- Fabrication of hydraulic hand operated pipe bending machine
- Automatic loading unloading robot for CNC machine
- Power generation movable scrap collecting robot
- Conveyor system using automatic inspection method
- Fabrication of automatic fixture clamping using swing cylinder
- Automatic CNC pallet changer for drilling machine
- Automatic pick and place paint spraying smart robot
- Improvement of reduced size mini hydraulic vice machine
- Pneumatic pick and place robot for material handling
- Hydraulic bending machine for sheet metal bending
- Fabrication of hydraulic fork lift for industries
- Movable pick and place robot for material handling
- Fabrication of salt water into pure water purifier
- CNC machine fixture auto clamping method for reduce the work load
- Automatic bed movement for conventional machine

- Automatic indexing machine for industries
- Non return valve using effective Speed Brake Power Generation
- Automatic brick making machine
- Plant Humidification for Textile Industries
- Color code based speed control for dyeing machine
- Automatic Crane System for manufacturing industries
- Medium power wind mill control for stand-alone energy generation
- Gear mechanism using of Foot Step Power Generation
- Remote Material Handle for automobile industries
- PLC based Automatic Bottle Filling System for automobile production industries
- Automatic Petrol Bunk Distance identification
- Pneumatic cylinder using automatic Sheet Metal Cutting Machine
- Movable Crane for Video Camera in automobile in
- Automatic multi function Lubrication Unit
- Automatic Bottle Washing Machine for production industries
- Automation in Pneumatic Multi Purpose Press
- Automatic Accident Avoiding System in Machine
- Motorized conveyer system for manufacturing industries
- Object Counter for Conveyer automation in production industries
- Artificial intelligent based path finding vehicle
- Air operated Automatic wall painting robot
- Smart two wheeler security system (fuel, front power disk lock, ignition lock)
- Sensor based automatic lifting machine using hydraulic power system
- Automatic punching machine using hydraulic power pack
- Air operated Automatic open close door for CNC machine
- Automatic bed movement for industrial conventional machine
- Automatic inspection system for industrial quality checking and control
- PLC based special purpose machine
- PLC based 3-axis Robot for material handling
- Effective method of Water purification using solar distillation method
- Automatic temperature controller using thermocouple sensor

- Visual inspection using image processing method
- Conveyor system using automatic inspection method
- PLC based automatic indexing machine
- PLC based automatic drilling and tapping machine
- Automatic safety alarm for prevent the accident for industrial machine
- Fabrication of Multi-spindle drill head
- Automatic packing system using pneumatic power system
- Automatic pipe cutting machine for piping industries
- Fabrication of hydraulic power plant for power production
- Automatic hydro-pneumatic power clamping and decamping system
- Design and fabrication of automatic fixture using swing cylinder
- Auto feeding pneumatic punching machine
- Fabrication of Soar Air Conditioner
- Automatic Motorized Electromagnetic Glass Door Open / Close Mechanism
- Fabrication of Remote operated weapon system
- Effective Fabrication of water cooler cum air conditioner
- Effective Fabrication of transformer heat reduction system
- Sensor Based Automatic paint marking machine for sprocket Industries
- CNC Pallet Changer for Drilling Machine in a industry
- Implementation of Production line monitoring system PLMS
- Effective pedal operated hydro pneumatic vice
- Portable Hydraulic Power Pack in electro mechanism
- Fabrication for Slotting Machine in high gain
- Fabrication of Drilling Machine with Variable Speed Drive In Screw Method
- Design of a microwave oven for the fabrication of transparent ceramic scintillators
- Jigs And Fixtures designing of fluid mechanism
- fabrication of single-crystal tin nanowires by hydraulic pressure injection
- Mini Vertical Milling/ Drilling Machine operation control
- Fabrication of Semi-Automatic Ramming M/C
- Design & Fabrication of Soft Start Couplings
- Motorized Power Jack in electric pallet control

- Overload protection system for a crane and safety management system
- Design and evaluation of an automatic gear-shifting system for industry
- Remote Material Handler with an robot trolley using electro mechanism
- Hydraulic Noodles Machine based on fluid mechanism
- Automatic Bar Feeding Mechanism in Hacksaw machine
- Working of an electric and Hydraulic Scissor Jack
- Hydraulic or motor operated screw jack in industrial application
- Industrial Automatic Material Transferring System
- Development of Industrial conveyer belt object counting system
- Automatic control system for filling beverage containers
- Implementation of Automatic car shutter
- Electro-mechanical Automatic steering controlled lead lamps
- Remote controlled wheel chair for physically disable persons
- Automation of Strain-Gauge Load-Cell Force and Calibration
- Ingredient masters Batch Weighing & Automation System
- Weight in motion technology for Commercial Weighing System
- Multi Axis Stepper Controller / Driver with Opto Isolation
- Multi Axis Stepper Robotics with Artificial Intelligence
- Demonstrate knowledge Stain Gauge and Weighing System
- structure and improvement of weighing accuracy for multi-hopper
- Textile Industries based Programmable Label Cutting Machine
- Two Axis Stepper Controller / Driver with Opto Isolation
- An automatic Wireless Crane Control System using PC
- Optimal Design and Operation of Wastewater Treatment Plants
- Technology development in the solar absorption air-conditioning systems
- Solar Powered Auto charging grinding machine
- Wireless based tilting wheel chair for physically disabled people
- Automatic paint spraying pick and place Equipment
- Automatic Car Parking System for apartment Building
- Conveyor Belt Sequential Timer Controller with Model for Bottling Plant
- Avoiding drastical accident by using Vehicle Speed Management System for Urban Areas

- Design of Automatic frequency control Induction Furnace Control System
- Boiler and Burner Management & Controller safety solution System
- Crane & Lift Operation Controlling and information System
- Development of a servo-controller of heart rate using a treadmill
- An Embedded Conductive Detection System for Intelligent Conveyor Belt Monitoring
- Implementation of Battery powered Flow Totalizer and indicator for Juice Industries

MECHANICAL MODELING & ANALYSIS PROJECTS

- Sensitivity Analysis of Headlamp mounting parameters for visibility and glare
- Comparative load analysis between helical gear and bevel gear
- Optimization analysis of helicopter tail rotor spar by using matrix composites
- Modeling of Static and dynamic analysis of knuckle shape threaded joints
- Finite element analysis of stress in butt welding of two similar plates
- Material optimization and structural stress analysis of eicher chassis brackets
- Material coating optimization and thermal analysis of a four stroke piston
- Design and analysis of roller bearing and hydro dynamic bearing in series Combination
- Modeling and simulation of powder coating using cam and follower
- Material optimization analysis of a wind mill hub
- Clutch assembly modeling and dynamic analysis
- Dynamic analysis of a clutch plate used in two wheeler
- Effective comparison analysis of a four stroke and two stroke piston of a two wheeler
- Design and analysis of crankshaft using metal matrix composites
- Structural optimization of typical light transport aircraft components
- Design and analysis of a three wheeler chassis frame
- Modeling of a conveyor and weight reduction of conveyor roller
- Design and optimization analysis of automobile propeller shaft
- Dynamic analysis of cam shaft used in automobiles with improved optimization Techniques
- Finite element analysis and material optimization of mono leaf spring used in maruthi Omni vans

- Computer aided modeling and optimization analysis of crankshaft
- Weight optimization and analysis of crankshaft
- Fatigue analysis of a universal joint
- Modeling and simulation of automobile braking system
- Modeling of single plate clutch
- Analysis and design modification of motor cycle alloy wheel
- Modeling and analysis of automobile drum brake return spring
- Design and analysis of hydraulic jack for lifting light vehicles
- Design and analysis of a rotary power steering system
- Design and analysis of cam shaft in automobiles
- Design and analysis of flange coupling in power transmission
- Design and analysis of leaf spring in heavy truck
- Modeling and steering and braking system in a car
- Analysis and optimization of connecting rod