

# REVIEW PAPER ON SOLAR BASED AUTOMATIC VOICE OPERATED LIFT

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## Abstract

*This paper presents the plan and development of voice worked lift/lift control framework. This framework goes about as human-machine correspondence framework. Discourse acknowledgment is the way toward perceiving the expressed words to make the essential moves as needs be. Client can likewise control the electrical gadgets like fan, entryway and so forth with the assistance of voice acknowledgment framework. The fundamental motivation behind planning this undertaking is to work the Elevator by utilizing voice orders. This gadget is useful for loss of motion, diminutive tallness individuals and actually tested people. Though the framework will work on sunlight based force with the goal that the expense of power is likewise saved. The sunlight based force will lessen the general upkeep cost just as the running expense of the lift framework.*

**Keywords:** Voice operated lift, Microcontroller, Voice Module, RF Module.

## I. INTRODUCTION

Nowadays peach signals are the main methods for correspondence in individuals. Pretty much every discussion to communicate is finished by methods for voice signals. Sounds and different discourse signs can be changed over into electrical structure utilizing a receiver [2]. Voice acknowledgment is an innovation which is utilized to change over the discourse signals into a PC text design. This voice acknowledgment innovation can be utilized to control and produce discourse affirmation utilizing some outside worker. The primary point of this venture is to plan and build a voice worked lift/lift control framework [3]. This framework goes about as human-machine correspondence framework. Lift is become the principle part of our everyday life. Lift is become a vehicle gadget that is extremely basic to us now a days. We use it consistently to move merchandise or people groups vertically in a high structure like mall, working office, inn and a lot more things. Lift is an extremely helpful gadget that moves individuals in the briefest opportunity to wanted floor. Lift is the crucial piece of everybody's daily routine experiencing in enormous structures, and besides it is the fundamental thing in huge structures or any large development having number of floors to move starting with one story then onto the next [1]. Just as our optional point is to utilize sun based energy for the working of the whole model, so it gets practical and because of which the general electric bill of an association or the client is decreased.

## II. LITERATURE REVIEW

Lift is become a vehicle gadget that is basic administrator part of our everyday life. We use it consistently to move merchandise and people groups vertically in a high structure like mall, working office, lodging and a lot more things and it's a helpful gadget that moves individuals in the most limited chance to want floors. it is important things in enormous structures or any large development having number of floors to move starting with one story then onto the next. For instance, shopping centers, shopping markets, schools, emergency clinics, lodgings. We are likewise going to offer sign to the security in crisis circumstance that implies if there should be

an occurrence of lift disappointment. It could be the issue in view of force disappointment or a lot more reasons of force disappointment. In crisis condition it will demonstrate to the security individual around then ringer will ringing on. [1]

Voice worked astute lift. This gadget is useful for loss of motion, visually impaired, diminutive tallness individuals and actually tested individuals. This venture will be useful for the general public. In this task MATLAB coding is use for voice acknowledgment and eye sensor is use for identifying the floors and halting the engine turn. The voice order is given as info and lift is worked upward and descending relying on the voice input given, and furthermore DC engine is utilized for controlling the lift. The miniature regulator is customized, with the assistance of implanted see guidelines and it equipped for speaking with all information and yield modules for flaw discovery and force disappointment ringer is utilized. [2]

Lift is become the principle part of our everyday life. Lift is become the vehicle gadget we utilized it consistently to move products or people groups vertically in a high structure like retail outlet inn and a lot more things. Lift is exceptionally valuable gadget to moves individuals in the most brief opportunity to wanted floor. Lift is an imperative piece of everybody's life. Living in enormous structures or any huge development having number of floors to move starting with one story then onto the next. [3]

Voice controlled robot is robot which can be movement constrained by providing explicit voice order on the portable application by client discourse acknowledgment is the capacity of an electronic gadget to comprehend and react to spoken orders it includes the preparing of discourse to the literary orders. A ton of use is utilized going from controlling hardware to being over close to home computerized associate (PDA). An android application will be the discourse acknowledgment stage which will speak with the robot through the web of things alludes to the organization of associated actual electronic gadget which can impart and trade information among themselves and reaction to order with no human intercession. This machine can learn all alone and make and productive utilized of its assets. This program incorporates getting the hang of, thinking, critical thinking and self-remedy. It tends to be helpful for various application, for example, assistive robots for older and individuals with incapacities for as working robots in numerous mechanical applications. It can likewise be utilized for route in warm plants and atomic plants. The Arduino will at that point incorporate the more character into a solitary word. [4]

Android-based modern flaw observing framework has a gas sensor and a temperature sensor. On the off chance that any of these sensors pass the boundary level the sensor triggers and enacts the ringer while the insinuation is shipped off the Android gadget through Bluetooth innovation. [5]

### III. SOLAR ENERGY

Sun oriented energy is the main wellspring of energy for living things. It is a sustainable wellspring of energy, dissimilar to non-inexhaustible sources like petroleum products. Sun oriented energy innovations utilize the sun's energy to light homes, produce boiling water, heat homes; in sun powered tank less water radiator .sunlight based energy alludes to energy from the sun. Sun based energy is unquestionably the best go-to wellspring of energy for them, and it is irrefutably the fate of our planet. Sun oriented energy is a totally free wellspring of energy sun based energy has additionally utilization of photosynthesis, sun powered energy is changed over into substance energy by green plants, which makes the biomass that makes up petroleum products.

Sun powered energy which contains brilliant warmth and light from the sun can be outfit with some advanced innovation like photovoltaic cells, sun oriented warming, counterfeit photosynthesis, sunlight based design and sun based warm power. The principle advantage of sun powered energy is that it doesn't deliver any poisons and is one of the cleanest wellsprings of energy. It is a sustainable wellspring of energy, requires low upkeep and is not difficult to introduce. the lone impediment that sun powered energy has is that it can't be utilized around evening time, and the measure of daylight that is gotten on earth relies upon area, season of day, season, and climate conditions sunlight based innovation can be recognized into dynamic and detached. Photovoltaic boards and sun oriented warm authorities which bridle sun based energy. Sunlight based energy can likewise be utilized for making saline water without utilizing power or synthetic substances.

### IV. SOLAR PANEL

Sunlight based energy starts with the sun. Sun oriented boards called "PV boards" are used to change light from the sun, which made of particles called "photons", into the power that can be used to control electrical burdens.

Sun oriented boards can be utilized for a wide assortment of utilization including distant force frameworks for lodges, broadcast communications hardware, far off detecting, and obviously for the creation of power by private and business sun based electric frameworks [6].

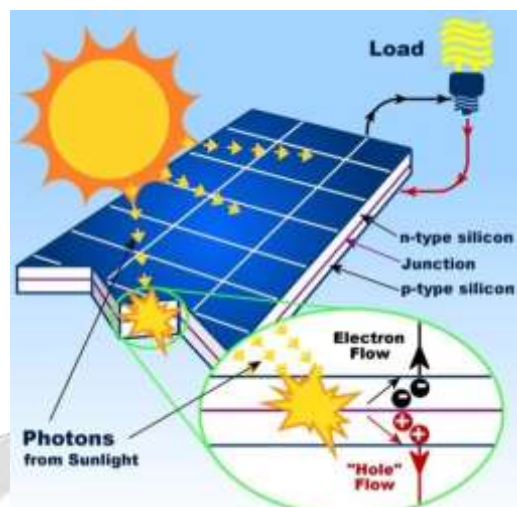


Fig.1

Sun based boards gather clean environmentally friendly power as daylight and convert that light into power which would then be able to be utilized to give capacity to electrical burdens. Sun oriented boards are contained a few individual sun based cells which are themselves made out of layers of silicon, phosphorous (which gives the negative charge), and boron (which gives the positive charge). Sunlight based boards ingest the photons and in doing so start an electric flow [7]. The subsequent energy created from photons striking the outside of the sun oriented board permits electrons to be taken out of their nuclear circles and delivered into the electric field produced by the sun powered cells which at that point manoeuvre these free electrons into a directional flow [8]. The cycle is called as Photovoltaic Effect. A normal home has a very sizable amount of rooftop zone for the vital number of sun oriented boards to create sufficient sun based power to supply the entirety of its force needs over abundance power produced goes onto the primary force lattice, paying off in power use around evening time.

## V. APPLICATIONS OF SOLAR ENERGY

A portion of the significant use of sun based energy are as per the following: Solar water warming, Solar warming of structures, Solar refining, Solar siphoning, Solar drying of rural and creature items, Solar heaters, Solar cooking, Solar electric force age, Solar nuclear energy creation, Solar green houses.

## VI. LIFT OR ELEVATOR

A lift (or lift) is a type of vertical transportation between building floors, levels or decks, ordinarily utilized in workplaces, public structures and different kinds of multi-story building.

Lifts can be fundamental for giving vertical course, especially in tall structures, for wheelchair and other non-ambulant structure clients and for the vertical transportation of merchandise. A few lifts may likewise be utilized for firefighting and departure purposes.

## VII. COMPARISON LOW AND HIGH-TECH LIFT

### TRACTION ELEVATORS

The significant contrast among footing and water driven lifts is standing out the frameworks transport the taxi. With footing lifts, the taxi is raised and brought down by foothold steel ropes or belts on a pulley framework. Contrasted with water driven frame works, foot hold lifts:

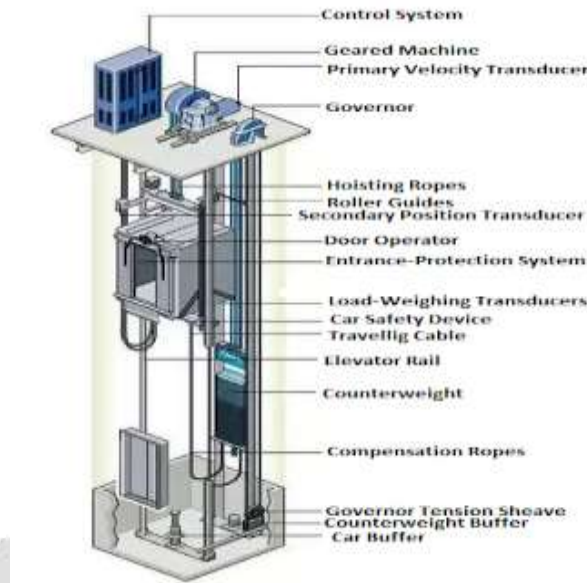


Fig. 2

**HYDRAULIC ELEVATORS**

In contrast to footing frameworks, pressure driven lifts don't utilize overhead raising hardware. All things being equal, these lifts lift a taxi by utilizing a liquid driven cylinder that is mounted within a chamber. The important liquid has customarily been oil-based yet can be supplanted with vegetable oil to diminish the natural effect.

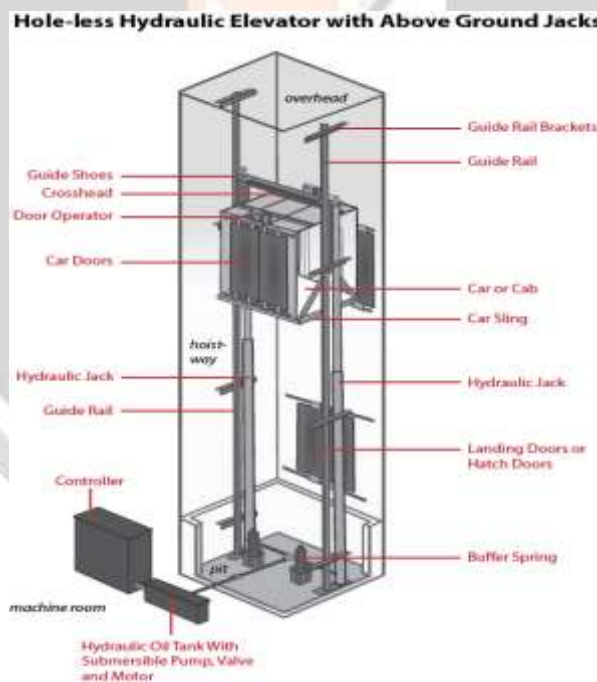


Fig. 3

**VIII. HOIST DRIVE TECHNIQUE TO LIFT**

A derrick is a gadget utilized for lifting or bringing down a heap by methods for a drum or lift-wheel around which rope or chain wraps. It could be worked, electrically or pneumatically determined and may utilize chain, fiber or wire rope as its lifting medium. The most recognizable structure is a lift, the vehicle of which is raised and brought down by a derrick instrument. Most cranes couple to their heaps utilizing a lifting snare.

"Derrick" is utilized to depict various sorts of gear that lift and lower loads. For instance, numerous individuals use "raise" to depict a lift. The data contained here relates exceptionally to overhead, development and mine derrick

## Cranes and Hoists

Control Techniques gives items, arrangements and administrations to meet a wide scope of crane and lift applications across numerous enterprises. Our drives are introduced in ports around the globe; they convey prevalent execution, are minimal, particular and length a wide force range, making them an ideal answer for establishment.

## IX. CONCLUSION

A voice acknowledgment program and its association with a regulator can supply an adequate measure of orders vital for the lift control on which the lift will work. The old lifts were having downsides like there was key press issue and time needed to squeeze one key was likewise more. In this voice worked lift, we are taken anticipation in crisis condition like lift disappointment and here sign given to the security individual who will be inside security lodge. This voice-based arrangement of lift is saving time however there was an issue of safety.

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