

## A survey on Applicability of bisociation and cognitive learning on Iot based smart watches and SOS Applications

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Available online at: [www.ijcseonline.org](http://www.ijcseonline.org)

Received: 12/Feb//2018, Revised: 20/Feb2018, Accepted: 15/Mar/2018, Published: 30/Mar/2018

**Abstract-** Creativity is the major source that creates the impact on users what the product is and what the content is, the bisociation has the capacity to connect the dissimilar components and the edge of the bisociation we apply the cognitive learning, as the cognitive learning has the byproduct of learning the theme on its own methods that have the capacity of artificial intelligence to maintain the legacy of brining the new ideas and the innovation to the sciences now. The main theme of this survey is based on how the genetic theory with the help of neural network get attached to the study of Iot the watch can sense the information when the person in critical zone and reports the nature and position through GPS. The paper focus mainly on thinking ability and innovation about the types that mature the concept of Iot with smart watch that sense with biological flavor.

**Key Words-** Bisociation, Cognitive Learning, GPS, SOS, Smart watches, IOT

### I. Introduction

Numerous organizations, for example, Apple, Facebook, Google, SpaceX, Amazon and Tesla see imaginative reasoning as a center competency and organized their plans of action around innovative reasoning ideal models. Our need to comprehend imagination is basic to prepare future specialists and business people to be thought pioneers, help partnerships to get inventive items to the market an anticipated time allotment, and tackle human issues. This task is to address the issue by making a reasonable structure for understanding bisociation construct both with respect to the apropos existing hypotheses in intellectual science and exploratory discoveries in both outline speculations and subjective science.

The undertaking will seek after the accompanying particular objectives other than other auxiliary objectives:

- Delineate the succession of occasions and techniques originators use to create novel ideas.
- Determine the impact of learning on bisociation.
- Identifying patterns between the outcomes and building instruction by train and the level of study.

“It is important to recognize advance in comprehension - the securing of new experiences, and the activity of comprehension at any given phase of improvement.

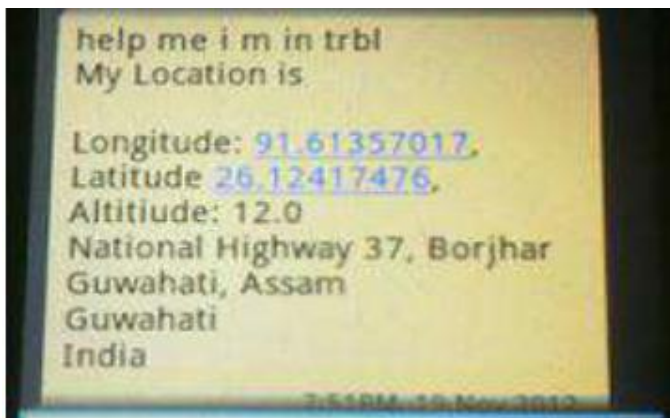
Advance in comprehension is accomplished by the plan of new codes through the change and mix of existing codes by techniques for exact acceptance, deliberation and segregation, bisociation. The activity or utilization of understanding the clarification of specific occasions at that point turns into a demonstration of subsuming the specific occasion under the codes framed by past involvement. To state that we have comprehended a wonder implies that we have remembered at least one of its significant social highlights as specific examples of more broad or commonplace relations, which have been already disconnected and encoded"[1].

The optional objective is to associate the impact of the Indian designing instruction with the bisociation abilities in the building understudies of various controls. To this end, the particular objectives incorporate the accompanying:

- Replicating bisociation tries different things with understudies of various building disciplines and distinctive ages.
- Benchmarking the outcomes with the secondary school, design, and brain research understudies and honing engineers.
- Identifying patterns between the outcomes and designing training by teach and the level of study.

For Example the bisociation gives an example for the Sensor and watch with an IOT touch gives a smart approach for the concept of bisociation

At the point when a ladies or tyke wearing this 'watch me' is presented to sexual or helpless assault, the sensor introduce in it identifies the heart beat rate of a man which will be high right now by the discharge of epinephrine hormone from hpa axis and gets enacted, this won't just give a alert sound to the consideration of close-by individuals, it will consequently make a call to our enlisted contact and furthermore through GPS/GSM it will recognize the close-by police station and influence a ring there so it to will be accommodating for police to arrive soon at the spot by following the GPS , such a framework will prompt more secure and better condition[2].



a) Smart Watch with heart beat detection  
b) SOS location based on longitude and Latitude

## II. Literature Survey

Numerous specialists have recommended the idea of bisociation (by various names) as a device for innovativeness. Utilized the term Medici Effect (for bisociation) and portrays it as "when you venture into a

crossing point of fields, teaches, or societies, you can consolidate existing ideas into an extensive number of phenomenal new thoughts." Johansson characteristics renaissance, one of the inventive time of mankind's history, to the Medici family. The Medici family bolstered a wide range of craftsmen and empowered them to cooperate. This joint effort between various individuals with fluctuated interests brought about numerous inventive commitments. This thought of inventively joining distinctive thoughts or abilities is basic for development today.

The purpose a comparative idea cross-pollinator as one who draws affiliations and associations between apparently disconnected thoughts or ideas to break new ground.

"Inventiveness at that point, is the way toward making adjustments to, and new mixes with, previous thoughts and ancient rarities, to make something new"

The originator of Apple Inc. echoes comparable thought in his statement "imagination is simply associating things".

Bisociation is the way to inventiveness and development. It can be seen an extensive variety of controls. Numerous fruitful outlines are an aftereffect of bisociation. Some particular cases of bisociation include:

- Nike shoe by Bill who considered putting a profound treaded design (like auto tires) to sole to made lighter and quicker shoe. The thought came coincidentally to Bowerman when saw the association between the state of waffle press and the shoes.
- London Underground guide by an electrical sketcher, who made straightforward yet exceptionally usable and conceivable guide, which later turned into a format for all tram maps. The shading map portrays the stations and interfaces them like an electric schematic to enable travelers to center around getting one station to another and not be occupied by the geology.
- Some components (seat and window withdrawing instruments) of Tata Nano were acquired from the outline of helicopter. Actually, the normal age of the plan group is 27 years and the group pioneer is 34 years of age. One can guess the absence of experience may have enabled the fashioners to partner and consolidate these particular ideas effectively.

- These illustrations and more from the history and also the writing survey demonstrate that bisociation regularly happens in the accompanying arrangement:
- the architect is "arranged" or dealing with an issue for quite a while

- He/she enjoys a reprieve from the issue and accomplishes something other than what's expected (another casing of reference).
- An "aha" minute happens where he/she relates these two casings to make an inventive arrangement.

The inquiry remains – What would we be able to do quicken the opportunity to the event of aha moments? In the response to this inquiry, we may discover better approaches to prepare designs with the goal that they are imaginative.

Configuration models can be portrayed as prescriptive (how architects should plan) and elucidating (how fashioners really configuration) models. While most scientists have concentrated on the prescriptive models with no consideration regarding how fashioners really outline. A few analysts have handled the errand of how creators really plan. The most essential research commitments originate from gathering at illustrative models, the thought age stage is the most imperative stage. The examination on this stage includes a comprehension of where thoughts originate from which incorporates bisociation Japan concentrated solely on idea mixing (bisociation) in idea age. Various analyses were directed by this gathering with various etymological outline ideas and also human subjects.

Kapur from National Institute of Advanced Studies Bangalore are seeking after research in the region of characterizing imagination with regards to Indian science. In India, IDEaS Lab at IISc Bangalore is seeking after research in subjective science. They took a shot at a model for basic leadership information in outline. This work is fixing straightforwardly to the models of the outline procedure. Their past work (2003) identifies with the human conduct as identified with creators and groups which incorporates how architects produce thoughts. The behavioral part is straightforwardly identified with the exploratory segment of the proposition. The second interdisciplinary group is Cognitive Science Lab at IIIT, Hyderabad.

#### Existing Android SOS Application

There are parcel of Android applications are accessible today. There are SOS based applications too which are created utilizing android stage. A portion of the SOS applications are recorded underneath. This application gives directions for managing an assortment of crises, including gagging, strokes, unfavorably susceptible responses and some more.

(a) SOS Emergency bolster arranged by Red Cross

This application gives well-ordered directions on managing an assortment of crises, including stifling, strokes, unfavorably susceptible responses and some more. It is a free application; it gives no. of recordings to mentor an individual through crisis conventions. In the event that a man isn't from the US, the application figures out what nation the individual is in and dials the fitting number.

(b) Olalash Emergency Alert Button (SOS)

Olalash Emergency SOS is a crisis SOS application. It permits entering if there should arise an occurrence of emergency contact from phonebook. Send SMS to enrolled contacts that the client is in a bad position and Click the gadget catch to trigger the application.

(c) Vith U application

The prevalent Indian wrongdoing TV arrangement "Gumrah" initiated towards building up a crisis application for ladies security. The working of this application is with the end goal that we need to press the power catch. In this application when the twice continuously and it will begin sending messages with a connection to the area of the client.

This paper portrays four models which depicts general execution of the venture.

- Registration of the client.
- Register the numbers.
- Check if GPS benefit is accessible or not.
- Sending the instant message to the pre-enrolled numbers.

### III. Existing System Survey

The paper [3] proposes a voice catchphrase perceiving application to perceive the client and actuate the application usefulness notwithstanding when the versatile keypad bolted. The GPS module tracks the longitude and scope to follow a correct area of a client and sends the pre-put away crisis message including area to the enrolled contact numbers. The Audio Recording module begins the account of the discussion for five minutes and put away as confirmations. The message goes in line if arrange issue and send when organize gets accessible. A notice is created for fruitful convey message. Likewise client can choose contact through voice based contact rundown and make a call. Note: The talked catchphrase changed over into a content to contrast and the enlisted watchword.

The paper [4] proposes a crisis reaction circumstance perceiving application called as IPROB to give ladies wellbeing even in the circumstance like psychological militant assaults or catastrophic event, by simply shaking the portable over the predefined limit esteem consequently actuate the framework. It begins catching the encompassing voice to test and affirm the dangerous IPROB circumstance where it raised the warning and client neglect to react in predefine time then the message caution sends to the enroll contacts. On the off chance that the versatile profile at the recipient is in noiseless mode at that point change over it into the General profile to give the voice warning as "YOUR CHILD IS IN TROUBLE PLZ HELP...PLZ HELP ... " persistently like a ring tone, until the point that they stop it. In the event that an enlist contact affirms a PROB at that point proper crisis administrations like emergency vehicle, fire detachment are cautioned. On the off chance that an enroll contact reacts with a discernable warning, at that point it naturally associates and empowers the speakerphone at the casualty side. An incorporated tri-pivotal accelerometer used to assess the one of a kind developments that a telephone encounters as edge.

The paper [5] proposes a SCIWARS application (Spy Camera Identification and Women Attack Rescue System) which comprise of two modules. A first module go about as an astute cautions framework which distinguishes the infrared beams originating from consistently vision shrouded cameras set in evolving rooms-lodgings room and so forth and furthermore educated the client about hazardous place through message. Presently it's the client duty whether to enlist a grievance or not by sending the warning with the area to lawful experts, for example, Police. The second module will get enacted by squeezing any key consistently which will give the assistance to the casualty from physic assault in hazardous circumstance. It sends the crisis message containing area to enlist contacts. It likewise records the voice and catches the pictures of the encompassing for 45 seconds. This data likewise put away in mystery area of versatile for future confirmations. This application likewise ready to changes over the beneficiary versatile casualty side.

The paper [6] proposes an android application to give security at two distinct circumstances as takes after. The First module give security to Women at Emergency Situations propose a Save Our Souls (SOS) application to gives the security on a solitary snap of SOS catch for the ladies going around evening time or alone. No compelling reason to open the screen, rather by simply squeezing the power catch it specifically triggers the application to keep running at the foundation, to send the crisis message incorporating the area as scope and longitude to the enrolled contacts. The second module proposes an android based home security framework that gives security of house things and Senior Citizen in the client nonappearance. Since the

security of senior native is dependably a worry with expanding number of theft occurrences. This application illuminates the client around an endeavor of interruption action at home through a message and an input SMS triggers an alert in the house. The base prerequisite is the android versatile, an equipment circuit inserted with a switch and GSM modem that are associated with the entryway. At the point when an interloper tries to open the entryway, the switch triggers a hinder for the microcontroller to initiate the GSM modem to send cautioning SMS to the store enrolled number in the modem. At the recipients end the application fly up the menu much of the time for client consideration. In the event that the client neglects to recognize in the characterized time interim, at that point the programmed positive affirmation message get send to the remote GSM modem which thus intrude on the microcontroller for an alert.

The paper [7] proposes an application, in which a solitary snap of SOS communicates something specific containing the area as well as sound video call to the gatekeeper number. At recipient touch the area URL in the message to see it in the Google Map. It additionally gives diverse enable devices to like First-Aid enable, Fake Call To help and video call. The First-Aid help instrument gives the assistance on different medical problem issues happened at a unintentional or crisis circumstance amid the evening time. Emergency treatment help for different issues are as: oblivious and not breathing, stifling, draining vigorously, consumes, heart assault, diabetes and so on. The Fake call help to escape from the gatherings parties when ladies begin feeling awkward and imagine that, "in the event that somebody calls me then I can leave this place". Counterfeit call rings tone same as that of ordinary approaching call ring and once call acknowledged it quit ringing. It additionally underpins Fake Hang Up choice. The watchman contacts are of course for this application, yet it ready to look through the cops, fire fighters, healing facilities contacts adjacent to your area. It likewise sends the sound video recording by means of Email-Gmail of crisis circumstance taken by the client where client unfit to talk or tell the conditions.

The Paper [8] proposed a compact gadget as a belt which is naturally enacted base on the weight contrast traverses the edge in perilous circumstance. A GPS module track the area and sends the crisis messages to three crisis contacts at regular intervals with refreshed area through GSM. The framework additionally enacts the shouting alert that uses a siren, to get out for help and furthermore produces an electric stun to hurt the assailant for self-protection which may help the casualty to get away. The gadget mostly comprises of smaller scale controller on the ATmega328 board which customized utilizing the ARDUINO programming dialect.

The paper [9] proposes the ladies security gadget called as "Suraksha" which is a simple to work gadget. This gadget can be actuated through-voice charge, Press a switch key and stun (i.e. at the point when the gadget is tossed with drive, a power sensor used to initiate the gadget). In crisis circumstance it will send the message including moment area to the police, by means of the transmitter module and enlisted numbers through a GSM module. As of now the work is under procedure to install it in adornments, portable or other bearer like belt and so forth. It can assume a noteworthy part in the propose ventures where all the police headquarters are associated and share the criminal records, wrongdoing researching cases and so forth.

The paper [10] proposes a stretched out vehicle following framework to track the vehicle in light of GPS with that it likewise gives the wellbeing through a crisis catch kept under the vehicle situate utilizing GSM. As the expanding financial development rate of a nation, numerous organizations are building up their setup in the adjacent area of the urban communities. Since, the security of ladies workers' inside the private transportation is the organizations' obligation.

In the dangerous circumstance a representative need to press the crisis catch to actuate the gadget Teltonika-FM1100. It thusly empowers at the same time the android gadget used to catch the pictures inside the vehicle and the GPS framework which track the vehicle position as scope and longitude. An alarm message including the area is send card to the organization exceptional group and adjacent police headquarters through GSM SIM. After that it is the obligation of police squad and friends group to deal with the circumstance.

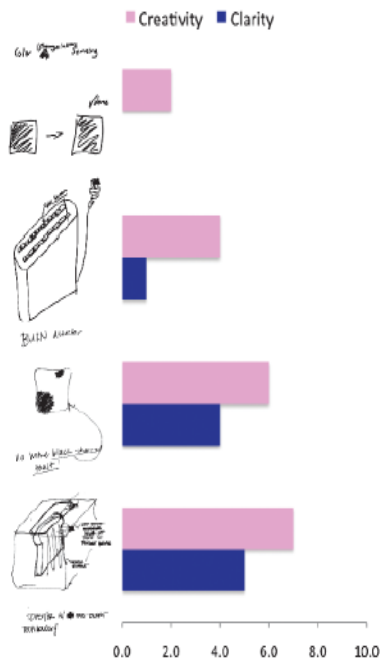
The security in the framework can be further improves by utilizing Geo-Fencing programming that uses the GPS and Google Earth to characterize the Area-Zone for a vehicle that go about as a virtual obstruction. An administrator utilizes the apparatuses gave by the product to define land limits which help to distinguish wherever a vehicle enters or leaves the tweaked geo-fenced zone and confine the drivers to movement from the delicate zones. The administrator can see the reports of vehicle position, speed, start status and voyaging report and furthermore teach the driver on the speaker telephone that is set inside the vehicle[11].



Bisociation with IOT and Smart watches and sos applications with novelty and utility factors

	Experts	
	Control	Bisociation
Utility factor	Max use of resources with GPS and IOT based content	Bi pair of Smart things with IOT gives good results for needs
Novelty factor	Scope of IOT based applications which have future up gradations	Definitely could be an achievement for passing the ideas to be implemented in real world

	Novices	
	Control	Bisociation
Utility factor	IOT based solutions gives a boost for the needs for Common man	Connecting IOT based applications badly needed for society
Novelty factor	Something Smart applications is always a novel Approach	Smart things may drive innovation in many aspects



## VI. Conclusion

Once the general comprehension of the contrast amongst specialists and beginners is acquired, our concentration will swing to the understudies (learners) where a similar trial will be rehased with various instructive foundations (diverse years in building Smart connections with IOT). Most building understudies can plan an answer for the undertaking – however commonly don't have point by point streamlined information. Along these lines, we anticipate that the undertaking will posture comparative test to all understudies. All outlines will be recorded and indexed. At that point, the outlines will be assessed for imaginativeness by a gathering of judges made out of understudies, staff, and honing engineers. At that point, the outcomes connected with their instructive foundation and guideline. To see how the space learning changes the outline procedure, we utilize understudies in electrical, gadgets and PC designing who know about Lego Mindstorm.

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