

## #TECHNOLOGY

Most people put their router in the wrong place (and Wi-Fi speed suffers). There's an easy fix for better Wi-Fi. Try these five tips to find the best place for your router.

## Home Internet



Have you ever been in the middle of an important Zoom meeting and suddenly your internet connection glitches? We can tell you how many times we have nearly lost our mind because of this exact situation. Proper internet connectivity is essential, especially as many of us continue to work from home. But despite paying monthly fees to an internet service provider and having the router professionally installed we still find ourselves spending too much time watching the computer grind.

The good news is there's an easy fix to these issues that will take you just a few short minutes. There are a lot of factors that determine internet speeds and while there's a few tricks or guidelines you can follow to improve the overall wireless speeds and coverage in your home, one of the most crucial factors is the location of your router. And note, it's not always where the technician set it up. So keep reading to learn about the best place in your home for your router and other tricks for faster Wi-Fi.

**The Right Router**  
First things first; it all starts with choosing the right router or other equipment. Not all routers are made equal, the size and layout of your home will determine what type of wireless network you need. For most apartments and smaller homes (under 1,500 square feet) a single wireless access point should suffice. That said, if your router is several years old, you may want to consider upgrading to a newer model with support for wireless 802.11ac and dual-band support. This will give you the fastest wireless speeds possible and the best overall coverage.

**Avoid Other Electronics**  
Try to pick a location that's away from other electronics and large metal objects. The number of walls, large obstructions and electronics near your router - higher are the chances that something will interfere with the signal. One electronic to especially avoid is the microwave, which emits a strong signal in the 2.4GHz band, the same wireless band your router operates in.

**Those funny-looking antennas actually matter**  
Some routers have no antenna at all, but some have up to eight. These antennas help direct the signal. If there are two or more antennas on your router, don't position them all in the same direction. Instead, make them perpendicular to one another - position one horizontally and the other vertically. Or slightly change the position of all the antennas to cover a wide range of angles.

**Try Mapping The Signal**  
In worst-case scenario situations, it may prove useful to map out the signal in your home to see where there might be gaps or problems areas in your coverage.

**Placing Your Router**  
When you first move into a new home or apartment, the



That there were more ways of identifying a person besides taking fingerprints or having a photo. I had read many a novels where just the examination of the footprints revealed much about the person. The size and depth of the print gave an approximate idea of the height and built. The stride could also help in this assessment. It was deeper when standing in one place. More so when carrying a weight. The pressure point of the foot changed in its imprint when walking or sprinting. Of course, this alone did not catch the thief unless there was previous intelligence available about the person.

# The Footsteps Will Tell It All



**Dr Goutam Sen**  
CTVS Surgeon  
Traveller  
Story teller

You see a person from afar. The light is dim. You cannot see his face. Still as he walks away from you the person is identified by you. Although a face is the most characteristic feature of a person there are many other aspects which are incidentally recorded in your brain which come in use in such circumstances.

About thirty years ago the wedding of a son was one of the big events that took place in our home. In those days there were no special wedding gardens or halls. The wedding was organised within the compounds of the home we lived in. All the guests who gathered from one week in advance would be expected to share whatever space there was in the house. A huge number of mattresses were piled in the rooms and they were laid out in whichever space that was available. There was one room upstairs which was for the exclusive use of the newlyweds. Anybody who passed our house would know that a wedding was taking place.

So when the burglary took place we were all downstairs and the

upstairs room had just one locked door. Nobody heard the perpetrators as we were all busy enjoying ourselves downstairs. They took away all the jewellery that was yet to be sorted out and placed in the bank locker.

**A Thorough Investigation**  
The police were informed. A sub-inspector and a constable came to investigate. A thorough inspection of all the approaches was done. In the rear of the house some clear footprints were seen. The police officer spent quite some time examining the footprint. He got up from his squat with a satisfied look. He declared with great aplomb that he knew who had committed the theft. The footprint was quite distinctive as one of the toes was missing. The sub-inspector then said that he knew of one habitual burglar who had been recently released from Jail and had a toe missing in his right foot. He lived in the same locality. He was quickly apprehended from his home and brought to our house to match the footprints.

This was in an era when neither pictures were taken nor moulds were made as evidence. The foot prints matched. The chap was taken into custody and after some third degree interrogation he con-



Stonewall Jackson.

## #SNOOP

fessed to the burglary. The jewellery had already been passed on to the pawnbroker and was untraceable.

This was the first time I saw and realised the primitive state of our forensic investigations. I also realised then that there were more ways of identifying a person besides taking fingerprints or having a photo. I had read many a novels where just the examination of the footprints revealed much about the person. The size and depth of the print gave an approximate idea of the height and built. The stride could also help in this assessment. It was deeper when standing in one place. More so when carrying a weight. The pressure point of the foot changed in its imprint when walking or sprinting. Of course, this alone did not catch the thief unless there was previous intelligence available about the person.

The other day's newspaper had a small clipping where a person had been convicted on the corroborative evidence of gait analysis. This

The study of footprints and gait analysis is now refining into the science of forensic podiatry. The principles of this branch are now helping investigators in establishing the suspect's physical and biological profile.



Footprint on the Crime Scene.

analysis has become a part of present day crime investigation. The CCTV image of the person may not often show the face of the person but his way of standing and walking may help in identifying him. The whole body language and bearing of each person has some outstanding aspects. Of these entire characteristics gait plays a prominent part. Forensic gait analysis or gait comparison is defined as the assessment and evaluation of gait patterns and features of the person or suspect and comparing these features with the scene of crime evidence. All though much can be discerned, this method of identification can only be used as additional information. The evidence comprises of a series of foot prints found at the crime scene and the Closed Circuit Television Camera (CCTV) footage of the criminal showing how he moved from one place to another.

**Gait Analysis**  
Foot prints can be recovered in the form of bare prints, shoe prints as well as a series of imprints. They will vary according to the task being done at that moment. These footprints can be encountered in several types of cases - burglary, robbery, sexual assault, mugging or even kidnapping. The study of footprints and gait analysis is now refining into the science of forensic podiatry. The principles of this branch are now helping investigators in establishing the suspect's physical and biological profile.

This evidence gathering of gait is not recent. One famous case in 1839 helped in conviction of Thomas Jackson, who was identified by a witness due to his bowed left leg and the limp associated with it.

Human walking is a complicated action which allows a specific pattern. This is broadly defined as a 'gait cycle'. It mainly consists of the stance phase and the swing phase. In the stance phase the footprint is examined in detail which includes the dimension and general shape.

At least four or five footsteps in continuity are required. The gait pattern helps in assessing the approximate stature, sex, age and bodyweight of the suspect. This becomes more useful if a video of the gait of the suspect is available to compare with the CCTV evidence. Although a large amount of data is consistent and comparable the inter-observer and intra-observer are beyond permissible limits most of the time. Computer based analysis using algorithms have a higher degree of accuracy. Some of the features that help in identifying a suspect by gait analysis are worth exploring.

The static measurements like the length of the whole leg and the knee-foot length are distinctive. The dynamic measurements determine the length of the stride and the cadence. It is interesting to note that the gait will vary according to footwear. The weight and shape affects the length of the stride. Even a tall person will take shorter steps in a tight fitting heavy pair of



The Gait Cycle. IC FF MS HL TO



User interface of the Gait Observer Measurement Instrument developers Prof E-Otten.

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boots. The stride in the morning compared to the evening will show changes due to fatigue. Often a drag mark will be seen later in the day. Sex, braces, speed and diseases of the knee and hip also contribute to changes in gait. At times many external factors like walking along with a companion (e.g. Marching), emotional state (anger/fear makes the person walk faster), listening to music and even attire are taken into consideration in forensic gait analysis.

**Reliable Data**  
The large number of variables makes the gait analysis weak evidence. The limitation of gait pattern analysis is also because of paucity of reliable data. There is so little to compare with. Presently, research is being carried out in the area of automated gait recognition incorporating large and variable data sets. Despite many improvements any form of forensic evidence without standardisation remains prone to error and should be treated with caution.

Irrespective of limitation and criticism about individuality and uniqueness, the court of law has begun accepting gait analysis as supporting/corroborative evidence. Many forensic cases have been solved and criminals have been convicted through forensic gait analysis throughout the world. So watch your steps if you do not wish to be caught in the act!

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## Happy Heart Hugs Day



What day is it? Well, today it's Happy Heart Hugs Day! What does that mean? Well, it means it's time to get super snuggly and lovely dovey with the people you really love - lots of happy hearty hugs all round! If you like hugs and cuddles, and telling people that you love how much they really mean to you, then this day is all about you and those wonderful people in your life.

## #TRIED&TASTED

### Healthy Munching

Craving something sweet but also trying to follow a healthy diet? This whole wheat ragi cake with the sprinkle of dates and walnuts is one of the healthiest cakes you can bake for yourself and your loved ones. Here's a must-try recipe, which is made using super healthy ingredients that will aid your fitness goals.

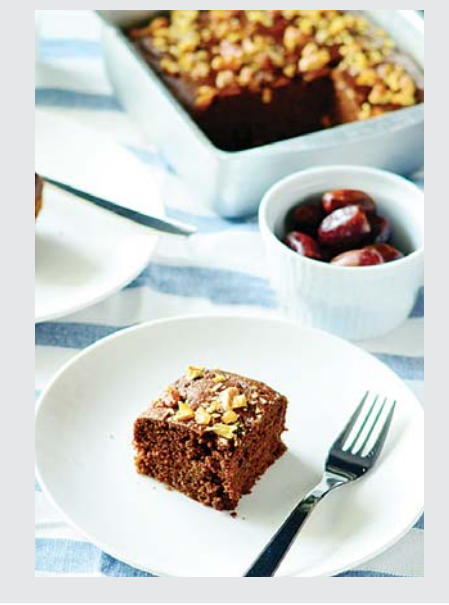


#### Ingredients

- For Soaking
  - Dates
  - Milk (hot)
- For Cake Batter
  - Olive oil
  - Curd
  - Whole wheat flour
  - Ragi
  - 1 tsp - Baking powder
  - 1/2 tsp - Baking soda
  - Milk
  - Walnuts
  - 5 dates (chopped)

#### Preparation

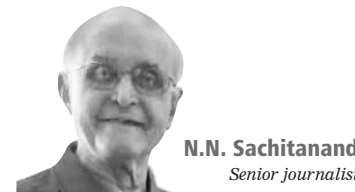
- Blend milk and soaked dates into a paste.
- Add olive oil and curd.
- Blend well until the mixture is well combined.
- In a bowl, combine wheat flour, 1 teaspoon baking powder and 1/2 teaspoon baking soda.
- Blend and mix well until combined. Add walnuts and dates.
- Mix by using the cut and fold method.
- Transfer the batter to a cake tray or bread mould.
- Pat the tray twice to remove the air from batter.
- Top with more walnuts as per taste.
- Place the cake tray into a preheated oven. Bake the cake at 180 degree Celsius for 45 minutes.
- Cake is ready to be served.



## #LIFE-LESSON

# The Wages of Graft

Om Prakash, was an old pal of his and revealed the contents of the competing quotations to Chadha. This enabled Chadha to underquote all the competitors and bag the contract.



**N.N. Sachitanand**  
Senior Journalist

Ranjit Chadha had gone mad. Now you will wonder why an affluent, hard-bitten, healthy contractor should lose his sanity. For that, we will have to recapitulate the course of his life. When Ranjit Chadha entered his profession, he was young, naive and honest. He had a diploma in Civil Engineering and some money left him by his father.

For the first year, he knocked about without securing a single contract. This so disheartened him that he nearly decided to take up regular employment. But his uncle, a shrewd and seasoned veteran in the field, advised him

growing up to be an exalted name in the country. Meanwhile, the contract work and graft continued, and his store of black money grew. Many were the roads he built which were reduced to a series of potholes in a single season; many were the buildings he erected which needed extensive repairs after their first exposure to the rains. He made sure, through appropriate bribing, that the repair contracts also landed in his lap.

Six months ago, he had landed a big contract for an over-bridge at a railway crossing. The departmental project engineer, Om Prakash, was an old pal of his and revealed the contents of the competing quotations to Chadha. This enabled Chadha to underquote all the competitors and bag the contract.

There was plenty of scope for making money on this project. The depth of foundations could be reduced, the steel and cement in the reinforced concrete could

be pared and so on. He expected to make at least Rs. 10 lakhs on the Rs. 40 lakhs he had quoted, allowing for Rs. 2 lakhs cut to the departmental engineers, overseers etc.

He was not worried about the structural stability of the bridge since he knew these things were designed with a very high safety factor. A fortnight ago the bridge was completed and formally inaugurated by the PWD

Minister, who said a lot of things in praise of the contractor, Ranjit Chadha. The words of praise were duly published by the local Press. The minister of course had been suitably rewarded by Chadha when the contract was bagged. After the inauguration, traffic hummed smoothly over the bridge.

Few days later, while Chadha was having his afternoon tea, the phone rang. It was Om Prakash, stuttering hysterically. "Chadha, the bridge has just collapsed about five minutes ago! Several vehicles were on it at that time. It is a terrible mess. There are a lot of fatalities. Come immediately!"

Chadha rushed to the bridge site and came upon a ghastly scene. Two of the pillars had come down and the main span had collapsed. About a dozen vehicles were strewn on the railway tracks below, with screaming and moaning passengers trapped in them.

But what made his heart stop cold was the sight of the overturned school bus. With dread in his mind he ran towards the vehicle from which dazed boys were being helped out. It was the bus of his son's school. His eyes searched desperately. And then he saw Prakash. He was huddled near a window. His head was twisted at an odd angle. He was not moving. His eyes were closed. Just then a fireman approached the boy's body and lifted it out of the bus. Chadha hastened to him and asked, "How is he?"

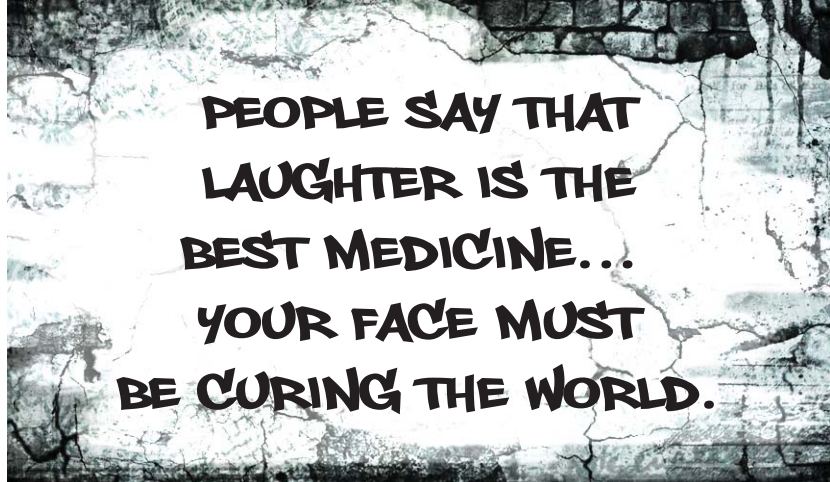
The fireman shook his head sadly. For a moment Chadha gazed despairingly at the lifeless form. The moans, shrieks and shouts buffeted his ears and rose to a crescendo in his mind. Then suddenly everything went blank and he began laughing.

When Om Prakash found his sometime later, Chadha had a fixed smile on his face, a hollow look in his eyes and no answers to any questions.

Ranjit Chadha had gone mad.



## THE WALL



## BABY BLUES



By Rick Kirkman & Jerry Scott

## ZITS



By Jerry Scott & Jim Borgman