



# DEPENDABLE LAPTOPS FOR UNDER 25K

If you were trying to find a laptop at this price range five years ago, you wouldn't be as spoilt for choice as you would find yourself now. But now, you can find laptops ranging from workstations and game machines with top of the line specs, all the way to solid and dependable devices which can fulfil the basic needs of most people. These budget friendly devices are dependable for tasks like web browsing, editing documents or even playing the odd game or two. And so with that, here's a look at seven recommendations for laptops under Tk. 25,000/-.

## Dell Inspiron 14-3473 N4000



Processor: Intel® Celeron® N4000-2.6 GHZ  
RAM: 4GB DDR4 2400MHz  
Storage: 500GB HDD  
Display: 14.0" HD Led  
Graphics: UHD Graphics 60  
Price: **Tk. 24,500/-**

Although it sports a rather slim profile, the laptop has a famously dependable hinge and according to Dell's claims, the laptop's lid will feel tight even after opening and closing the lid 20,000 times. The anti-glare screen also makes for an easy viewing experience.

## Lenovo Ideapad G4135



Processor: AMD Dual Core E1-7010 Processor-2.3 GHZ  
RAM: 4 GB DDR3  
Storage: 500 GB HDD  
Display: 14" LED  
Graphics: Intel HD Graphics  
Price: **Tk. 23,000/-**

Lenovo's Ideapad laptops are usually a bang for the price and it's no different with the G4135. The successor to AMD's E1-6010 processor, the E1-7010 dual core processor is fast and shines in performance within the budget class of processors. Lenovo however opted for DDR3 RAM over the superior DDR4 for this laptop.



## HP 15-db0000au

Processor: AMD Dual-Core E2-9000e- 1.5 GHz  
Display: 15.6" HD WLED  
Memory: 4 GB DDR4  
Storage: 500 GB HDD  
Graphics: AMD Radeon™ R2 Graphics  
Price: **Tk. 23,800 /-**

The E2-9000e is one of the more well-rounded processors found on budget laptops but combine that with the Radeon R2 Graphics and you can even play some games on this HP laptop. The 15.6" HD display is also larger than what is found on most netbooks and budget laptops.

## Asus X540YA

Processor: AMD E1-6010-1.35GHz  
RAM: 4GB DDR3L 1333MHz  
Display: 15.6" HD LED  
Storage: 500GB HDD  
Graphics: AMD Radeon™ R2 Graphics  
Price: **Tk. 22,800/-**

The Asus X540YA is one of the few laptops in this price point, to come with USB Type-C ports which means faster speeds when transferring files from external devices. Although the AMD E1-6010 is a couple of generations old, it is still a solid single core processor.



## Lenovo IP110

Processor: Intel® Celeron® N3060- 1.60 GHz up to 2.48 GHz  
Display: 14" HD LED  
Memory: 4GB DDR3L Ram  
Storage: 1 TB HDD  
Graphics: Intel® HD Graphics 400  
Price: **Tk. 24,800 /-**

With a built-in 1TB HDD storage, Lenovo did not compromise when it came to beefing up the storage for this laptop. While the DDR3L RAM and 400 series Intel graphics card are outclassed by the other devices on this list, you can't have it all now, can you?



## Asus X407MA

Processor: Intel® Celeron® N4000- 1.10 GHz up to 2.60 GHz  
Display: 14.0" LED backlit HD  
Memory: 4GB DDR4 2400MHz  
Storage: 500GB HDD  
Graphics: Intel® UHD Graphics 600  
Price: **Tk. 24,000 /-**

The Asus X407MA comes with a fingerprint sensor and looks just like any flagship Asus laptop. The bezels on the laptop are slim too with a 73.8% screen to body ratio. Arguably the most stylish laptop on this list, the Asus X407MA is a stand out from

## Acer Aspire ES1-533

Processor: Intel® Celeron® Processor-N3350- 1.10 GHz up to 2.4 GHz  
Display: 15.6" HD Led  
Memory: 4GB DDR3L SDRAM 1600MHz  
Storage: 500 GB HDD  
Graphics: Intel® HD Graphics 505  
Price: **Tk. 23,000/-**

Another laptop with a large 15.6" display, Acer's ES1-533 is one of the first budget laptops based on the Intel Apollo Lake platform. The new platform supposedly offers 30% more performance compared to the Braswell. Combined that with the 505 series and you have a very solid workstation.



## AIs: A bleak future with inequities?

Technology has disrupted the way we have been living our lives, undoubtedly. With all the good it has vowed to bring, it has been able to get rid of pernicious institutions i.e. racism and sexism. Artificial Intelligence or AI, the messiah, is touted to become the modern man's saviour, by liberating them from messy and clunky process of decision-making. But is that the case though?

To put it simply, Artificial Intelligence is nothing but a string of self-devouring code that learns from the historical data, logic and decisions. So what that means is that the more data you feed it the more it is likely to make the right choice, decision or provide the right outcome, right? But what if the data that you have been feeding it is skewed? What if the training dataset is already manipulated? Would you still expect the outcome to be best? No you won't. And that's exactly what's happening now. Most of the data we are feeding to AIs, is already biased in some way making the outcome biased as well. This very thing happened when a team of researchers from MIT was working on an income prediction model. They found out that the system was twice as likely to miscategorise the income of women as 'low-income' and that of male employees as 'high-income.' In order to correct the bias, researchers had to increase the dataset by a factor of 10 which decreased the bias by 40 percent. This is just one example. The AI based services of the BIG FOUR use perennially has subtle racism and sexism in it. If you use Google Translate, to translate from gender neutral language to gender biased language, it will mostly like convert most of the pronouns to the male-based

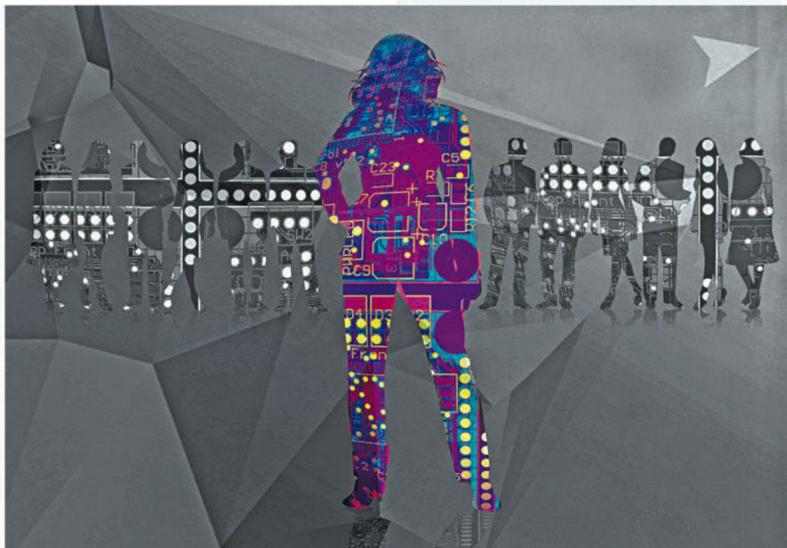
ones. COMPAS, an AI used by the US judicial courts, has been at the receiving end of tremendous backlash, after researchers revealed that the AI, based on the racial profiles of convicts, provides skewed predictions on how likely a defendant will be in regards to ending up in jail again. And this is just the tip of the iceberg. The actual problem is much more deep rooted. Attention should be paid when training the system, particularly in case of large datasets. As datasets are rigged with imbalance of

social infrastructure and bias, these data needs to be checked.

And the system should also include information on methods of data collection and how they were annotated. Datasets accompanied by associated metadata can help to weed out the bias as well.

If we don't put the systems through an unbiased data, a future with no bias will become bleaker.

SHAHRIAR RAHMAN



## Elon Musk's patents belong to you now

On January 31, 2019, Elon Musk made all Tesla patents public to encourage the production of electric cars. This move has been in the works ever since a blog post went live on Tesla's blog site in 2014, where Elon Musk offered Tesla's patents to anyone willing to help fight climate change. He went on interviews claiming that he would not file lawsuits against anyone using the patents. But to understand the gravity of what he has done, it's important to understand the build-up to this moment.

The Tesla patents were originally made public in 2014 and Elon Musk said at the time that even competitors had started using Tesla's patents. He made the patents public as a point of advocating the expanding electric car market. One of the initial goals of making the patent's open source back in 2014, was to ensure that more third-party companies would design charging stations which could accommodate Tesla cars and also the other electric cars on the market. And while Tesla have accepted the use of their technology in open arms, it is still not a legal and binding document.

Both announcements came from blog posts from Elon Musk himself where he promised that Tesla will not file lawsuits against anyone who, "in good faith",



wants to use their technology. Perhaps the move was somewhat strategic as, on the same exact date of January 31, 2019, US prosecutors filed a case against a Chinese national for stealing secrets from Apple's self-driving vehicle project. Elon Musk wants for the electric car market to grow above what Tesla can achieve themselves and beyond the realm of limitations of patents. Electric cars reached a milestone of 5 million cars sold in December 2018. This number only stands to increase on account of Elon Musk's bold actions.

Tesla have around 300 patents ranging from car battery designs, structure, charging and cooling systems. And with the constant work Tesla puts in towards achieving more efficiency and more power from their batteries, electric car designs will only keep on getting better.

All of Tesla's patents are accessible via <https://patents.justia.com/company/tesla> so if you want to start building your own electric cars, then look no further than 16 pages of over 300 patents, dating as far back as 1974.

ASIF AYON

