CONNECT TO NEXT STEP

Take your next step to connect to us. Email us if you have an interesting story to share related to career.

facebook.com/thedailystar.nextstep

Email: nextstep@thedailystar.net

The Daily Star

DHAKA, FRIDAY, NOVEMBER 30, 2018

AGRAHAYAN 16, 1425 BS

e-mail: nextstep@thedailystar.net

CAREER | ENTREPRENEURSHIP | SKILL IMPROVEMENT

NEXT STEP

5 CAREERS WHERE PROGRAMMING WILL TAKE YOU TO THE NEXT LEVEL

If you've been told that your field of study is going to be rendered obsolete within the next two decades because of the rise of AI, you've allowed yourself to be misled. AI will replace humans in a lot of jobs that humans are hired to do today, but who will be designing these AIs? Programmers, yes, but individuals in their own fields can take advantage of the imminent revolution in information technology today. All they need is to combine their knowledge of a certain discipline with a working knowledge of how to instruct a computer to do a job more efficiently than themselves, and they could make themselves essential in the upcoming revolution.

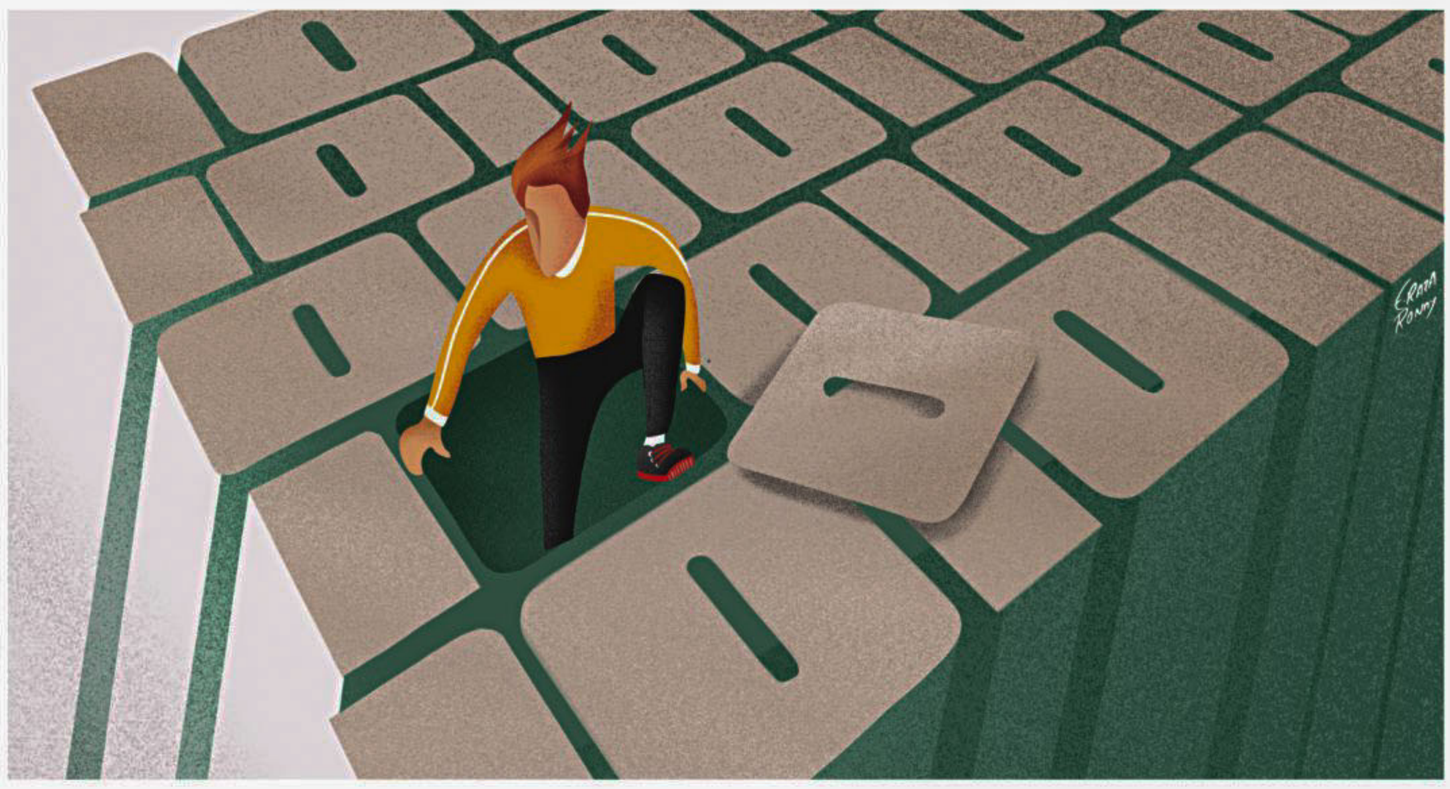


ILLUSTRATION: EHSANUR RAZA RONNY

ACCOUNTING

Accountants deal with a lot of numbers, and while there are lots of softwares and tools that are in use today, an accountant with knowledge of programming could come up with the solution to a problem that is specific to the company they're working at. Data analysis using a language like Python could up their game, give insight and understanding of the numbers an accountant is dealing with that may not have been possible without it. Spreadsheets can, admittedly, accomplish a lot, but a solid grasp of programming languages and using those languages to create visualisation tools will help spot inconsistencies that would not be apparent otherwise.

MARKETING

This is a field that is going to become more and more data driven as years go by, with a huge chunk of consumer interaction now taking place online. If marketing, and by extension digital marketing, is going to become more and more reliant on data about how users react to content, then marketers need to take control of this flow of data and be able to design tools that can more accurately classify interactions, and deduce what triggers said interactions. A rich knowledge bank on how users react to content will help predict movement of consumer needs in the future, giving the marketer an invaluable resource to get ahead in the game. Once again, Python is the go-to language for data analysis and a solid grasp of it is soon going to be an all powerful weapon in the field of marketing.

TEACHING

Teachers do some of the most important work in our society, and while we're far from the days where the responsibility of nurturing young minds will be passed down to robots from humans, information technology is becoming more and more of a dominant presence in classrooms all over. Teachers can contribute greatly to the design of these tools that are going to become the norm in schools, colleges and universities. Our country suffers greatly from a lack of teachers, which makes it difficult for a teacher to dedicate themselves to the case of one individual student and their development. Tools that are able to analyse a student's output in exams and in class and inform teachers about the right pace of study for that specific student or the classroom in general would do an excellent job in making learning easier for everyone. Teachers need to be involved in the designing process of such tools to provide perspective and a real life point of view to make these tools more efficient.

ENGINEERING

For engineers, the knowledge of programming can relieve them from a lot of heavy duty calculations that'd otherwise take up hours of their time. If they're having to do a projection over and over again, designing a tool that does it for them will save tons of time. There are tools that are used industry-wide but certain projects often throw specific challenges that would take an ordinary engineer a lot of get around, but an engineer with a knowledge of programming could design a tool for that project and make life a lot easier. Programming can also help design machines and project output, giving an option to double and triple check vital calculations where a small mistake could cost a company tons of money.

SOCIAL SCIENCES

The vitality of data is a recurring theme in this article, and that's because data is vital. The information age has made it clear that the collection of data, proper archiving, and using it to project outcomes is the rough formula for most fields of study. Research in the social sciences deals with data the same way, using patterns and recurrences to understand various social phenomena. Programming is essentially the skill that allows you to handle data in a meaningful way, and that is why it is a skill with much importance in the fields of social research. Tools that are designed the proper way will help make sense of vast amounts of data quicker than the human mind, and that is why programming is so important here.

Programming is often talked about as a survival skill for professionals in different fields, a shield to protect them from the impending doom where technology will replace them. What gets lost in translation and may be the most important thing to remember is the fact that knowledge of programming could redefine how a certain discipline is even supposed to impact human lives, and that is a change professionals need to make themselves a part of.

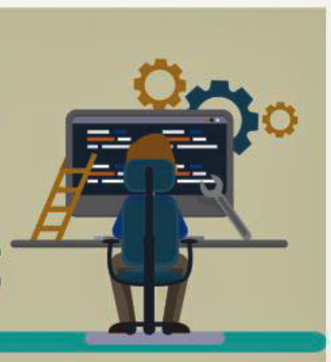
AZMIN AZRAN

Azmin is a sub-editor at Shout, the youth magazine of The Daily Star. Reach him at azminazran@gmail.com.

THE BOSSMAN

BY E. RAZA RONNY

BUSTING MYTHS ABOUT PROGRAMMERS



1. YOU MUST BE GOOD AT MATH

Programmers don't use complex formulae of calculus on an everyday basis, you just need to know basic algebra, unless your code requires more extensive mathematical knowledge. Even then, you can use plenty of resources to make you life easier.

2. YOU MUST BE A GENIUS

We've all been told that programmers have IQs over 160. But coding, at its very basic level is merely a language, and anyone who has enough practice in the language can be a good coder.

3. YOU MUST HAVE A FORMAL EDUCATION IN PROGRAMMING

You may think that the only way to be a good programmer and land a job in the industry is to study Computer Science, but coding is just like any other hobby, and you can practice it no matter what you formal line of education is.

4. MEN ARE BETTER AT CODING

The only reason you don't see that many female programmers is because of the systematic oppression that has stopped women from entering STEM in the first place. The times are changing, and women are just as good at their job as men.

BY AANILA KISHWAR TARANNUM

Gossip in tech companies

Have you ever experienced any discomfort within the hierarchy, especially at the top? Perhaps the use of unofficial power by a co-worker of lower rank overriding your authority to destabilize your work plan and performance?

This of course depends on the varying levels of intimacy with your boss. There is one most talked about virus which is pervasive in its presence across any organisation. This virus is popularly known as *kan kotha* in Bangla (workplace whispering). *Kan kotha* is presented in a manner that makes it very juicy. Interestingly, most CXO level executives and board members cannot resist the temptation of gossip, and fall easy prey to such crooked whisperers as they receive it sandwiched in flattery. These whisperers hit the weak spots of the boss and deliver some twisted information to safeguard their vested interests. This drives the boss crazy in an instant flash. The whispering materials are delivered safely of course, in your absence.

K.M. ALI

The writer is currently serving as a CEO in a reputed organisation. He occasionally writes columns on corporate culture for various dailies.

Making a DIFFERENCE

Bangladesh is rapidly moving towards middle income status by 2021. Our businesses definitely offer immense opportunities for the growing economy and this diversity needs a stage for the stories untold. See Bangladesh make its mark on the global map as Making a Difference brings you our proudest success stories from across the country.

LEARNING TO CODE THE RIGHT WAY

If you are an absolute beginner in the world of coding, then you should go about it in a certain way. Starting with a complicated coding language will only confuse you.

FIGURE OUT WHY YOU WANT TO LEARN CODING

Coding can be used in a plethora of ways - for building websites, making games, creating softwares; the possibilities are endless. There are specific languages for each task, so do your research and decide on which language will help you reach your goal.

STARTING FROM SCRATCH

MIT created a free programming language for dummies called Scratch. I had a course in university called Computer Applications, and that was the first time in my life I had to learn to code. Scratch helped me understand the basic principles behind the logic used in coding, and I would recommend it to any beginner who has zero knowledge about computer programming. It's fun, colourful, and easy.

LEARN THE LANGUAGE

It's time to finally get down to business, so look up tutorials for your chosen programming language and start with the very basics of it. You can slowly move to writing code for pet projects from there.

KEEP PRACTICING

Coding seems like a daunting task at first, with a steep learning curve. But it's not some inherent personality trait that makes people good at it. Practice makes perfect, so don't give up if your code has a few bugs.

Don't forget to have fun when you're learning to code though, see if you can come up with random ideas and bring them to life using code.