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MODERN RESEARCH IN THE FIELD OF INFORMATION AND COMPUTER TECHNOLOGIES

Today the young computer science students are of the highest demand than ever. As statistics show, computer science graduates have some of the highest starting salaries out there and are in so appreciated that they can afford to be choosy concerning the type of job and industry they opt for.

And it's not difficult to see why. Technology has been increasing so sharply during recent years, there has been a steadily growing demand for smart graduates to come in and help to transform areas ranging from data infrastructure to cyber security. If you are interested in bright a career in computer science, it's important to stay up to date with the latest trends in computer science research, to make an informed choice about where to head next. We propose to review these six trends storming the tech industry!

1. Artificial intelligence and robotics

Predicting that the global robotics industry will reach $ 80 billion by 2024, much of this growth will be possible due to investors' interest in artificial intelligence (AI), one of the most controversial and mysterious areas of computer science research. The technology to create artificial intelligence is still in its infancy, but technology giants such as Facebook, Google and IBM are investing huge sums of money and resources in this innovation study and research of AI. Unfortunately, there are not enough opportunities for full implementation of the technology, and there are huge prospects in this area.

2. Big data analytics

Back in 2012, the Harvard Business Review called data science "the coolest job" of the 21st century. Yes, you read that correctly. More experts are needed in this area, and popular companies and agencies have stepped up their efforts to encourage and engage data professionals. From banking and healthcare, datasets are everywhere, as companies are increasingly trying to make better use of the vast amounts of data they own to personalize and improve their services.

3. Computer-assisted education

The use of information machines and software helps education and training, computer help brings many benefits and is useful in solving many problems. For example, for students with disabilities, he can implement an individual study program and give such students the opportunity to learn without exhausting themselves, freeing the teacher to spend more time with each person. Technology is gaining momentum, it is the future, and many teachers praise its ability to allow students to take active, independent and playful learning.

4. Bioinformatics

The exciting application of rich data sets, bioinformatics, or the use of programming and software development to generate vast amounts of biological information data for research holds great promise. Combining large pharmaceutical companies with software companies, bioinformatics is gaining popularity and

employment opportunities for computer scientists and graduates interested in biology, medical technology, pharmaceuticals and computer information.

5. Cyber security

Analyzing the data of the US Bureau of Labor Statistics, cybersecurity jobs are expected to grow by 28 percent between 2016 and 2026 - much faster than the average for all professions, and there is a shortage of skilled workers. In February 2015, Barack Obama spoke of the need to "collaborate and explore partnerships that will help develop the best ways to strengthen our cybersecurity." Why does he think so? We live in a super-technological age, where absolutely everything happens on the Internet - from banking to dating to government infrastructure. Nowadays, data protection already exists necessity both for individuals and especially for states, which makes it another growing area of computer science research.[1]

6. Democratizing programming

This means making programming simple and straightforward for those who want to do it, and making machine or system programming more accessible. This is not a new idea; COBOL, the "common business-oriented language," was an attempt in the 1960s to create computer programs using English that would be more accessible to people far from programming. Today, we are seeing a huge interest in low-code platforms that promise us to create software without the need for specialists. There are also platforms such as consumer-focused IFTTT or enterprise-oriented Zapier, which allow a less technical audience to connect a variety of devices, SaaS platforms, endpoints and workflows to do interesting and relevant things. And if you're looking for an integration framework, Apiant, Blendr, Microsoft Flow, Pipedream, Quickwork and Tray.io (to name a few) can help. As for application development, Amazon Honeycode has gained momentum, although one of the authors of the radar describes it as "Microsoft Access in the cloud."

We believe that the ability to program, or at least have some idea of how it works, that we use, is extremely important. In Douglas Rushkoff's book, Program or Program, he argues that we must choose whether to control technology or allow those who have mastered it to control it. It is also an obvious fact that today requires more software than can be created by existing IT teams.

Tables are a typical example. Almost every business has a spreadsheet, and all representatives of the IT industry have seen what the disadvantages may be; Huge tables with imperfect business logic built into them are quite common. Not so long ago, and even more disturbingly, we have seen many health services around the world lose or incorrectly process COVID-19 data due to spreadsheet errors. Spreadsheets are typically used to allow non-programmers to quickly create, store, and process data without having to go through a long development cycle with "real" programmers. Low-code platforms are similar in that they promise to speed up software development by using pre-baked components and configuration instead of code. [2]

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