Question 1

How do you think computer science, computer engineering and/or a closely related technical field is changing the world? How do you plan to contribute?

Answer

Computer Science is changing the world with the help of the following areas explained below:

1.) Invention of programmed machines with the aim of relieving human beings the stress of doing things over and over again. In industries where workers are to carry the a number of process in producing or manufacturing a particular product tend to make such job a monotonous one for them as the same process has to be taken in manufacturing the product every day hence, making them feel bored. This might as well affect the productivity of such industry, and when productivity is affected, it affects the economy of such nation and probably the world in general.

2.) **Big data analytics**: by Big data, I mean, voluminous data set which cannot be handled by organizations dealing with data. Data set used by most organizations tend to be so voluminous and as a result, lead to wrong analysis and a time wasting process. By using analytical tools such as Weka, Hadoop, such voluminous data sets are analyzed without stress.

3.) **Networking:** The world is fast becoming a small village with the help of network (MAN (Metropolitan Area Network), WAN (Wide Area Network), LAN (Local Area Network), Internet among others), as different users can connect different part of the world with the aim of sharing information in just a click.

4.) **Artificial Intelligence:** artificial Intelligence which is the intelligence exhibited by an artificial entity has greatly contributed to the changes in the world. For example, we have non-human entities carrying out the jobs of human beings and by extension results in increase in productivity and time saving. Different aspects of the world among which are the education, health, agriculture, communication, transportation, industry and law have been greatly impacted.

5.) **Cloud computing:** organizations and individuals do not need to bother about data loss and confidentiality as data or documents can now be stored in the cloud without any restrictions in the size of data to be stored.

6.) Internet of Things (IoT)

7.) Programming

My contribution:

Programming: by writing programs to solve problems in different areas of the world be it transportation, communication, education, agriculture, law and so on.

Question 2

Please discuss the structural issues impacting underrepresented groups that you have observed or experienced in computer science, computer engineering, and/or a closely related technical field. What connection and/or effect do you think these have to the industry and/or the wider world?

Answer

1.) **Gender differences:** the perception of people generally about the performances or capabilities of females in the STEM related fields is that the females are not allowed to be

engaged in some tasks such as development of a software or web for instance, they think all the female folks can handle is the design, and when it comes to development or things relating to logic should be handled by the males. This as a result, lead to decrease in the interest of females in any STEM related field as well as reduction in the number of technical personnel who are supposed to greatly impact the world positively.

2.) **Working experience:** when it comes to analyzing people with technical skill and their working experiences, the males have a higher number as compared to the females. The reason for the low number of technical women with working experience is that most of the experienced females are leaving the industry as compared to the males due to one reason or the other.

3.) Family: the natural and generally acceptable duties of women is to take good and proper care of their homes. In some cases where we have these same women working or holding the positions held by men in various organizations, combining the two different duties may result into one being properly done at the detriment of the other.

4.) Qualification: people with lower qualifications even if they are highly skilled are often not paid attention to. Educational qualifications which these people strived to attain are now being turned down, all in the name of not meeting up with the laid down criteria. These people might in turn not be motivated in building their skill set and by extension, reducing the positive impact that would have been added to the world in general.

Question 3

Please write about an activity that you are currently or recently involved in to address structural issues for underrepresented groups in your field.

Answer:

Developer Student Clubs (DSC) FUNAAB Chapter is a Google Developers program for University students, designed to help them build their mobile and web development skill and knowledge. It is open to **any student** ranging from starting, to advance developers who want to further improve their skills. It is intended to be a space for students to learn and collaborate as they solve mobile and web development problems. The focus of the DSC program include:

- **Delivering (Mobile) development skilling**: delivering and facilitating mobile development skills to students at their college/university or other accredited college/universities around them.
- **Developing solutions for local businesses:** the trained students will apply the skills learnt and develop solutions on the mobile platform. They will be encouraged to build for the local community (mainly local businesses).
- **Creating visibility for trained developers**: the community will present the solutions in campus-level and city level showcases, and give them increased visibility.
- **Stories + opportunity for growth:** we will be empowered to share our success stories within the campuses and at the local community level.