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My major is computer science with the focus on software development. I chose this major because I had an interest in software designing, programming, and mobile application development. Computer science gives you the ability to solve a problem, stay connected to the world and develop useful applications for consumers and enterprises. There are different specialties within computer science community, for example software designing, software development, problem-solving methodology, design data structure, increase software performance, networking, manage server, prototyping and much more. I wanted to get more and real knowledge about the computer science industry besides college. I interviewed an industrial employee who has experience in computer science field. This interview provided me real knowledge about my major and gave answers to all my questions which I thought all the time about computer science major like what computer science people do, how they get a job after college, why this major is important, what are good opportunities in the future and one of my favorites: How much a computer programmer can earn. I also did a small interview with my friend who recently got the job after finishing his undergrad from San Jose State University and tried to relate his story with my interviewee. I will include an interview summary and will explain all the responsibilities which people handle in computer science. I will include my personal reflection about this interview and also how much this interview satisfied all my questions about the computer science field?

I decided to interview Mr. Rajan Pokhrel, who was working in the computer industry for the last 7 years. He grew up in Nepal and finished his undergrad from Kathmandu Engineering College (Nepal) and received his master's degree  from Michigan State University in Computer Science. He started his career from BigFix company as a software developer. BigFix is a tech company located in Emeryville which develops the tool that handles IT security, mobile, Desktop and server real time access. He spent four years there and reached a senior level developer position. He worked on a development team that was responsible for handling Server-side operations. Later he joined a 24/7 tech company where he worked as the senior software developer. 24/7 is a tech company located in Campbell, CA; and develops sales and service-oriented software that encompasses big data, predictive analytics, virtual agents and real-time decisions and virtual agent. Mr. Rajan has been working for the last 2 years. He’s working in a developer team which is responsible for managing virtual agent customer service tool. Virtual agent is an AI based customer support tool which talks with the customer and solves customer problem with AI through the chat program. He started worked a startup in his extra time. He builds a website which grabs news from all over the website and creates important news with the AI algorithm.

Education play a key role in everyone's life especially when you are looking for a job. Rajan cleared some of my thoughts when I asked him, “How important is education and college degree in computer science?”. Rajan think education is a key step to reach your goal and a college degree is the very first important step to get a job. He said, “there is more chance to get a job with a degree than having no degree.” According to Rajan a degree is not the only requirement to get a job because when a manager sees a resume, everyone has a degree but not everyone gets the job. So to reduce the number of resumes the manager looks for internships and extra knowledge besides a college degree. Rajan mentioned during the interview that an internship is so important because it not only helps you to find a job, but it even gives you real industry experience and also gives idea that what elective courses you should take if you want to work at specific field. From his experience, he said he worked on several projects and participated in hackathon which helped a lot for the industry level learning experience. Hackathon is a private open developer context where the developer creates a fully working application in a short period of time.  Usually, hackathon is organized by tech companies who give the opportunity to the developer to work their own idea and the winner get a cash award.

As a software developer, Rajan job title was Back End developer. His responsibility was to write code for a Server monitor application. He used different programming language for the different tasks. There are more than 200 programming languages and most of the languages perform the same task but developers create new languages according to the complexity of the application. Rajan knows 8 programming languages but mostly he used JAVA, C++, and Node to handle the server Side Code. He was also responsible for creating suitable Data Structure to handle big Data. “ A data structure is an arrangement of data in a computer's memory or even disk storage. An example of several common data structures are arrays, linked lists, queues, stacks, binary trees, and hash tables...” (Jeff, “ *idevelopment*” ). Data Structure is very important for handle different kind of data for example, In Big Data developer used Linked List (programming language term ) for storage and for small Data they used Array List (programming language term). Although any Data Structure can be used for any kind of tasks but it makes a difference in performance and now everyone wants to get results fast so Data Structure plays a key role in developing any kind of application. During his fourth year working at BigFix, Rajan responsibility changed from developer to design documentation. He said documentation of the program is very important because it explains about software to the consumer or any non tech person. The documentation explains all function and responsibilities of the program and also explain detail about a program like what this program do, where this program will work and what its drawbacks are under special conditions. Usually, programs are hundreds of thousands of line codes written in a computer language which is very hard to read when you want to fix code somewhere in the middle That's why documentation plays a key role in the debugging task. This was completely new information for me because I did not know how important documentation was?

In the computer science community there are several different positions where people work at different position For example Software applications developer, Computer systems analyst, Computer systems engineer, Network systems administrator, Database administrator, Business intelligence analyst, Web developer, Software systems developer, Software quality assurance (QA) tester. There were some positions I was confused about so I asked Rajan “what is Network admin jobs and do they require any special degree?” I asked this question because I did not see separate degree for network engineer. To answering my question he said, “Network admin is very important because every software company is a cloud based company and it's very important to securely handle data packet over the network so Network admin is responsible for all kind of data transfer like the client to server or server to the client.” According to Jennifer “A network administrator, sometimes called a systems administrator, is responsible for keeping an organization’s computer network up to date and running smoothly. Any company or organization that uses multiple computers or software platforms needs a network admin to coordinate the different systems...” (Jennifer, “*rasmussen*”). Rajan also worked as a project manager where he was responsible for keep tracking of full team activity and submit the final report to a different department who handles consumers report and that department looks to see if the task is matching consumer’s requirement.

According to Rajan, teamwork plays a key role in the development of a company because in the industry no one works alone there is always a team for a specific task. Communication between the team is very important because everyone has different ideas to solve the problem but to decide which one is better requires communication between members. While working as a developer Rajan said when they got the design report from the Design Development Department, they took the time to understand design first and then the team decided that whether the design could be implemented or not with the given tools. If they wanted any kind  of changes, they gave a report back to Design Team. Every department in the company organized weekly or monthly meetings to communicate and take a suggestion from other team members about development or problems which helped to improve company performance.

Every person should be creative to be become a computer engineer. Rajan said creativity plays a big role in growing yourself in industry or outside of industry also. He mentions most creative people start their own company which helps to grow and the best part of working on your own startup is that “you are working for yourself rather than working for someone”. Discussing creativity Rajan shared his friend’s story who was working on Facebook at an Entry level developer position and his creativity increased this position. The Facebook company organized hackathon program for this employee where they give times to employees to work on their ideas and if they like they help them to implements. Rajan friend was working on some feature of  group chat messengers and when he represented the idea to the company, they liked and they used it in their product and Rajan’s friend’s position and salary increased. This information encourages me to work on my idea with more enthusiasm because I am also working to develop an Android App.

After listening to Rajan, I had more information about computer science field, not only at the academic level but also industry level. It gave me more knowledge of what is necessary to become a good software developer. Now I know there is many more skills required to work at different position level. I am more concern about Rajan words about internship where he mentions how internship helps to get the job. Therefore, I am also looking for an internship in tech company where I can apply my academic skills to make a real product. The most important thing I learned from this interview was about “Documentation” and why it is so important. Now I will also work to improve my code writing skills. There are important key notes I picked from this interview which I want to improve in future like teamwork, documentation, creativity and most important is hard work.

**Citation**

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