Spencer De Hoedt ID: 3794454 Email: spencer111@iinet.net.au

GitHub link https://github.com/spencer111111/IT-project/tree/master

Job aspects are an endless area of IT, software development, IT help desk, AI and driverless cars. The role in IT is an endless profession before I joined the course I had to look at the IT profession and jobs out there on seek.com. You looking to the further for next 30th years IT job is a challenge at age of 44 years old, most company look to younger generate not someone graduated at 47 years old. This is what want to do nothing can stand in your way to do a job meant for you.

I always had to interest IT from a young age, I was building a computer when was young which were 086 and then went 286. I remember when I used to get parts broken down machine my uncle had to my first 086 computer. So always had interest in IT, when start years 9 to 10 I did computing study and found how memory work, hardware, and input device work, then I realize how verst fielded computers are and what involved creating the hardware that goes into the computer. I always want to get into designing hardware in computing but I was not smart to get into that field.

I was doing a search on the IT profession and study I need do, I look at TAFE and looked into university and didn’t have time attend university or TAFE, then someone at work mentioned about Open University which you didn’t need to attend. So did some research into Open University and found the university was in Melbourne after long consideration (a few months) I decided to join RMIT.

After graduated from university I was hoping to go into join the programming team at my working place at the moment. There are looking programmers and someone who does this course is working with programmers. This company gives an opportunity for workers to progress to the next step. The person did this course was working in production and progress to a programmer. I am hoping this could be in 3 years’ time or hopefully sooner.

In the Myers I was introvert 53%, intuitive 9%, Feeling 47% and Perceiving 41%. This means I calm and collective but team environment this doesn’t mean it is a bad thing, it means you thinker in the team or doer, hard worker how to get thing do. I also governed by feeling this means that have to keep my feeling in check when making decisions because I make decisions on other people feeling as well. This one reason I pick a job I want to work with east Timorese with developing their country, this decision was made with feeling for others helping out people. “At Catalpa, we work with people around the globe to create change. We use design and technology to connect people, make information accessible, and nudge behaviours for social good. Our programs are in aid and global development, spanning education, health, social inclusion, environment, aid transparency, labour mobility and more. ” This quotation was from Catalpa on the website seek.com.au.

Learning style test I found out that I am Visual learners learns I good at using diagram and symbols to represent idea and information. This means I can’t have the TV on when I am studying anything Visual to distract me, this good test aid me to get best out of the study and also use in my study to aid me.

Entrepreneurial Quiz to see if was borne lead team and came up short in everything, I was below par for your motivations, your aptitudes, and your attitudes. This ability to run team in a company, I am below par in all tests. This comes to when I was a team leader for two weeks when my boss was on leave, one of the managers said to me you are not a leader because of you too nice to people.

From the profile which has done, the job that suites me help people in the country need help for a developed country like Australia. I come from Sri Lanka, my background in Europe (Dutch) grandfather and my great-grandfather came to Sri Lanka help people in need (doctor). Maybe this in my blood to help people in need

Back-End Developer

Relevant mindset, qualifications, and experience:

• Bachelor's degree or higher in a related field.

• 5+ years of relevant experience in software development.

• A solid understanding and experience of UNIX/Linux server management.

• You have used complex relational databases and are capable of administering PostgreSQL installations and developing against them using an Object-Relational Mapper (ORM)

• Experience in developing applications using server-side scripting languages. We use Python and the Django Framework, but experience with other languages is quickly transferable with a bit of desire and effort.

• Experience using source control. We use Git, but if you're used to other versioning software, you'll get on fine.

• You have previously worked in a team to collaboratively build software, completing assigned tasks and resolving bugs and issues.

• Enjoy developing alongside designers, researchers, and other highly skilled people.

• Driven to continually uncover and share new developments and technologies.

• Comfortable working with a diverse set of colleagues (co-workers, clients and mentors) to complete a project.

• Inspired by shaping products from their inception to their release into the wild.

• A passion for making great products, and most importantly;

• You're fun to work with.

Link to website **https://www.seek.com.au/job/38591001?searchrequesttoken=01646357-b2e2-462b-bad8-de31e2dcb5cc&type=standout**

To get a job, I need experience in Software Development +5 years. This means I have work in programming about 5 year in current company working on software development for instrument for monitor greenhouse gas and dangers gas in Mine Company.

**Data losses in space**

The further IT is in space exploration about compressing data that can send in space. My project is to work on a program that can compress data and that can be decoded easily at another end. The basic rundown is the compression ratio of about 5:1 depends on what you are sending. Data compression is known as compression power. There are a few different software that compresses file which are WinZip, 7-zip, WinRAR and compressor which are used to compress data. When we looking at the vast area of space there are losses and have to take this into consideration and to avoid losses to have unmanned relay station in space combated losses.

The motivation behind this I used working satellite communication when sending raw data directly is expansive and losses is a problem. Plus if sending signal for mars to earth there are going be significate losses, in proposal to drop significate losses is have unmanned relay station in space between earth and mars to boost signal and decode and cored the massage. This is a problem with space but overcome this problem we need take significate step. Using compress tool like WinZip encored and decodes data make losses significant less.

NASA use series of large dish antennas designed to receive the very weak from space; my proposal is compress and encored data, sent to relay station will receive signal decode the data check for losses if ok then send to next destination. I am meanly looking at compression software and Compression ratio. When we look at compress programmes like WinZip are using compression Algorithm this Quotation Wikipedia “According to Gregory Chaitin, it is "the result of putting Claude Shannon information theory and Alan Turing’s Computability theory into a cocktail shaker and shaking vigorously. The compress Algorithm is:

Compression ratio = Uncompressed Size/Compressed Size

Ex. You have 10mb file after compressed 2mb ratio factor 10/2 ratio is 5:1

There more theoretical calculation into idea but this understanding of compression ratio. Now we go onto how the program works lossless compression techniques. Most lossless compression programs do two things in sequence: the first step generates a *statistical model* for the input data, and the second step uses this model to map input data to bit sequences in such a way that "probable" (e.g. frequently encountered) data will produce shorter output than "improbable" data (Fact from Wikipedia).

Technologies and tool use to compression is called data compression which two techniques lossy compression is reduces bits by removing unnecessary or less important in formation and lossless compression reduces bits by identifying and elimination of statistical redundancy. They are lot compression tool and programmes that can compress and decode text to be sent for transmission made by programmer.

The make program that to compression file and document can be done but transmitting space and having relay station is near further we will have be a realty because when we send people to mars. We will need transmitted data reply though space. Next generation IT professional will lead way in sanding data though mars and beyond. With have the relay station will be too costly for one country to bear. It has to be a joint effect. The project in