PERSONAL INFORMATION:

Name: Daniel CANFIELD

Student: s3893763

Email: s3893763@student.rmit.edu.au

I am a 30-year-old male born here in Australia and I currently reside in Melbourne so holla if you are also living here! I learnt to grow up extremely quickly on my own and finished school up to a year 10 level before serving in the Australian army for five years. After a deployment to Afghanistan, I moved on to law enforcement which I enjoy however I spend most of my time doing something in the IT space rather than revise law which is why I am making a change. I am English speaking however I do know how to have a basic conversation in Swedish after living in Sweden for seven months. I believe that you should never stop learning and as I have recently found some downtime outside of work, I have decided to take the leap of faith and pursue more formal learning in the IT sector!

INTERETS IN IT:

I believe that my interest in IT stemmed from when I was a child around the age of 8 years old. My father bought an XBOX (original version one which I still have) and we used to play together for hours! He has since passed on but having a father who accepted that part of computers (gaming) and that we owned an old windows 95 system which I used to get in to trouble for tinkering with and trying to work out how to add random things to a floppy disk such as different operating systems which subsequently would cause the computer to crash which gave me an excuse to reinstall an Operating System (OS) and keep on figuring things out.

The interest never faded over time and in the last 20 years I have done everything IT hobby related such as restoring old vintage gaming systems such as my old Nintendo 64 and taking old laptops and other electronics I find to pull apart and try to create different gadgets with. I made a face fan out of an old laptop cooler once and that was hilarious to look at.

My most current IT experience includes working in IT recruitment for 12 months in the last two years and recently building my own desktop gaming PC with some decent components after days of research and learning everything from monitor hertz, static electricity while handling components to motherboard/CPU and Graphics Processing Unit (GPU) compatibility so I could get a Virtual Reality (VR) system to work on it. It took one LONG week of waiting for all the parts to arrive and only three hours to set up.

I have loosely dabbled in programming languages such as JAVA, JS, Python and would love to learn Golang and other modern, solid languages. I also have unity which I am doing a Udemy course on which I am loving, and I have a computer lab setup with a Linux laptop (Kali) which is used to crack my desktop with using different tools.

I chose to come to RMIT for study as from the reviews they provide the most detailed and flexible online learning experience a university can provide. I expect to learn a lot more during this subject, and further subjects. I am not overly familiar with HTML5 and CSS3 however I am also doing a course that will improve these skills and I hope it shows in this website!

IDEAL JOB:

Senior Application Software Engineer

Saluda Medical

https://saludamedical.bamboohr.com/jobs/view.php?id=51

← Job Openings

Sr Application Software Engineer

403 - Software Engineering · Sydney, New South Wales

We are looking for a **Senior Application Software Engineer** to specify, design and develop the next generation of our clinical application and patient controller software.

About you:
You are someone who is passionate about coding and eager to develop world class applications. You have the leadership skills to mentor other engineers and are able to liaise with a variety of stakeholders.

You are looking forward to bringing your problem-solving skills to a team adopting best practice. You are customer focused and understand how to translate the needs of the end user into your work and vice versa. As well as all of this, you understand the need for strong documentation, particularly in a highly regulated environment.

This is a unique opportunity to have a significant impact on the quality of life of chronic pain patients and others with neurological disorders.

About Saluda Medical:
We are a medical device company developing advanced neuromodulation systems for the next generation of implantable stimulation devices. We are a cutting edge, progressive Australian based company with offices and employees based in Europe and the USA. We are at the forefront of spinal cord stimulation technologies for the management of chronic pain.

Our team is made up of world-class engineers, clinicians and seasoned professionals with experience in bringing medical technologies to life.

About the role:

- Participating in requirements and design review meetings
- Define software architecture and design
- Implementing software
- Performing software testing, verification and validation
- Conducting all aspects of software development and testing according to medical device software standards
- Developing technical documentation

Essential Requirements:

- Bachelor's degree or higher in Software Engineering or Computer Science
- 10+ years hands-on experience in the design and development of business logic and communications interfaces
- Expert in C# and MS .NET framework
- Experience in using such version control systems as Git or SVN
- Experience with and commitment to software development in a QA controlled environment
- Experience in working in an agile software development environment
- Very good written and verbal communication skills
- Commitment to work in a team

Desirable Requirements:

- Experience in medical device design
- Experience in Angular JS
- Working knowledge of IEC 62304
- Knowledge and practical experience in object-oriented analysis & design using UML
- Experience in UI design and development
- Experience in design and development of multi-language, cross-platform UI applications for embedded devices
- Experience in using such programming languages as Python
- Familiarity with various software development practices and ability to work as a self-managed professional
- Working knowledge of regulatory requirements
- Experience in the neuromodulation industry

You must have the legal right to work unrestricted in Australia, no visa or sponsorship support is available for this role.

Candidates may respond to this posting; we respectfully ask for no agency approaches.

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START AD:

Senior Application Software Engineer

Saluda Medical

More jobs from this company

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My ideal role would be an owner and leader of a company that improves systems that assist emergency services and the health sector. This ad is the closest I could find in relation to this.

This advertised position is extremely appealing to me because it focuses on spinal microchip technology in the healthcare sector which will assist people who suffer from related pain and neurological health issues. This is especially appealing to me as I suffer from chronic back pain from my military service and something that Saluda Medical is attempting to improve and implement for future use.

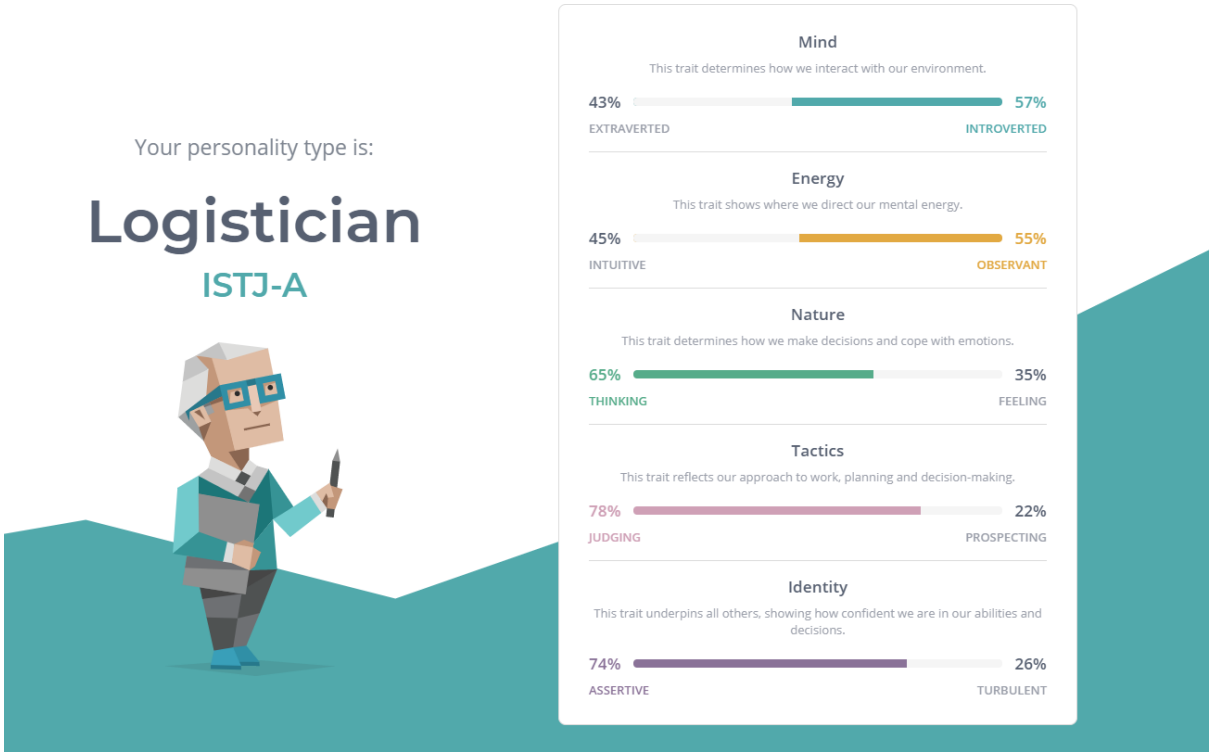
The requirements for this role include not only being a dedicated team player, but also ambidextrous with over 10 years in programming languages such as Python, AngularJS, C# and MS .NET framework. I imagine a more modern version of .NET would be required due to the innovative environment this company is promoting. You must also be a process driven person.

I currently have a beginner level of experience in HTML5, CSS3, JavaScript, jQuery, Python and C# however if required I can set my mind on a certain language and framework so 10 years is more than enough to learn the required languages and frameworks associated.

Being IT, there are thousands of options available to develop and improve new skills that are required to obtain a dream role. For this 'ideal' role I would create a portfolio during my time as a junior developer and project contributor in similar companies. I would learn the required programming languages by not only pursuing further formal education through university however I would also complete more Udemy/Skillshare courses and provide portfolio examples of how solid

my code would be and obtain references from work colleagues after participating and leading projects.

PROFILE:



16personalities.com = https://www.16personalities.com/free-personality-test/a69fdd2b3360c

EDUCATION PLANNER.org

Print Window

What's Your Learning Style? The Results

Daniel CANFIELD's scores:

- Auditory: 35%
- Visual: 40%
- Tactile: 25%

You are a **Visual** learner! Check out the information below, or view all of the learning styles.

Visual

If you are a visual learner, you learn by reading or seeing pictures. You understand and remember things by sight. You can picture what you are learning in your head, and you learn best by using methods that are primarily visual. You like to see what you are learning.

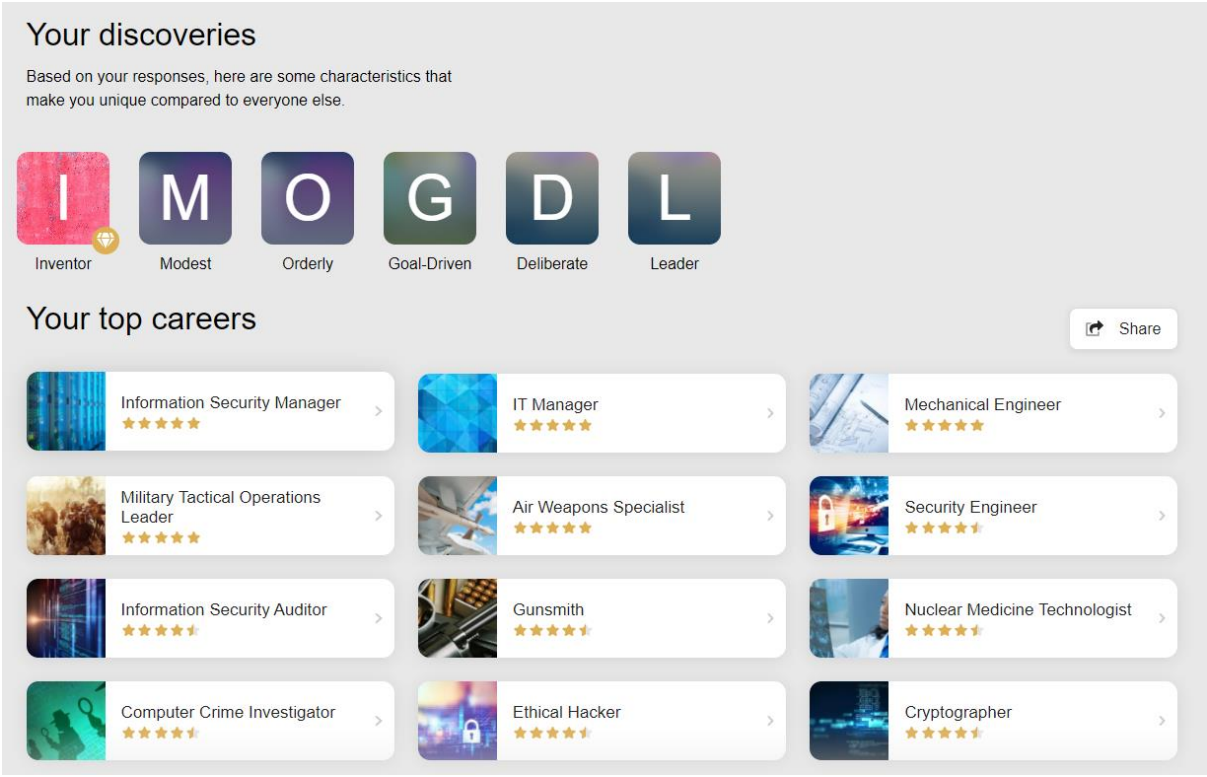
As a visual learner, you are usually neat and clean. You often close your eyes to visualize or remember something, and you will find something to watch if you become bored. You may have difficulty with spoken directions and may be easily distracted by sounds. You are attracted to color and to spoken language (like stories) that is rich in imagery.

Here are some things that visual learners like you can do to learn better:

- Sit near the front of the classroom. (It won't mean you're the teacher's pet!)
- Have your eyesight checked on a regular basis.
- Use flashcards to learn new words.
- Try to visualize things that you hear or things that are read to you.
- Write down key words, ideas, or instructions.
- Draw pictures to help explain new concepts and then explain the pictures.
- Color code things.
- Avoid distractions during study times.

Remember that you need to **see** things, not just hear things, to learn well.

Educationplanner.org = http://www.educationplanner.org/students/self-assessments/learning-styles-results.shtml?event=results&A=7&V=8&T=5&N=Daniel%20CANFIELD



Careerexplorer = https://www.careerexplorer.com/results/

Q1• What do the results of these tests mean for you?

A1: The results of these tests mean that overall, I could be useful in an environment where deep thinking is necessary however when the time comes to decide I am more than comfortable to have my input. My strengths include Being observant, picking up detail. They also include a lot of thinking and judging the next move.

Q2• How do you think these results may influence your behaviour in a team?

A2: I believe that at first a collaboration would be necessary however if it came down to an uncomfortable decision, I would not have an issue with giving my ideas and a direction to take. I would however respect the decisions and listen to others as everyone thinks differently.

Q3• How should you take this into account when forming a team?

A3: When forming a team, I would try and include not just similar traits but also completely opposite traits to complete the circle of association. I don't think that if you placed a bunch of sheep in a pen anything would get done without a sheepdog at least giving ideas and try to get some traction.

PROJECT - The colour code

OVERVIEW:

The emergency services in Victoria communications centre of operations only have one link between Ambulance Victoria (AV), Victoria Police (Vic Pol), Fire Rescue Victoria (FRV) and Victoria State Emergency Services (VICSES); through a radio communications system called ESTA. As a police officer myself, it is quite noticeable the communications lag between requesting information from other departments in relation to a job you are attending that require other services.
This obviously can cause issues. You arrive at neighbour dispute for example, and you have not had the radio airtime to request further information in relation to history of residence, any weapons involved and orders in place. As You can imagine this becomes time consuming at times and can be dangerous. Yet, we still attend to try and not only calm a situation, but also find out if the area is safe to attend to begin with. This is where my project comes in to play.

MOTIVATION:

Working in emergency services gives me an incredible insight into what the communication system is like. For example, without breaking any laws, we receive a job via the radio, and we attend and deal with whatever we are faced with. A single radio channel services a division which could be up to 100 police units. We do request additional information along the way but by doing so, this uses valuable ‘airtime’ as they call it where other units may have a more pressing issue to raise or notify a supervisor. This is because most of the information required isn't usually available on hand to the attending units and thus putting that unit at risk. If the job is of a high priority and the unit needs to attend quickly, they may not have the airtime to request further information therefore increasing

the danger upon arrival. My main motivation is more of a concern about the efficiency of information passed on to emergency services members on scene.

DESCRIPTION:

My main aim for this project is reduce radio traffic and the amount of time waiting or requesting assistance via radio communications when other private companies use technology that is up-to-date and do not require radio communications whatsoever. The main piece of equipment to promote this concept would be to have a monitor or similar that would advertise all of the available jobs that require attendance from each and all emergency services.

However, instead of there being only a communications centre link between emergency services jobs, every job would be displayed on this interface that have a colour coding system that describe what type of service is required. For example, Police could be represented by the colour black, Ambulance could be blue and fire departments as red.

Let us run through a typical job that someone in emergency services would attend. An Ambulance is called to a vehicle collision, the job would be blue on the interface screen. However, the involved vehicles were leaking hazardous materials, so the job would flash from blue to red to indicate fire department response after the ambulance operator identifies the danger and presses the link on screen to let the forward commander or police sergeant on duty know that the Victorian Fire Service is required to attend. After both the Ambulance Victoria and Victorian Fire Service units respond, a member of the ambulance service observed one of the drivers of the collision to be unsteady on his feet and deemed him to what they believe to be intoxicated so they would press an option on the task which is already flashing blue and red on the interface, that a police response is necessary to speak to the driver and confirm whether he is in fact intoxicated.

The interface would be completely interactive and integrated between all three services. It would grant access for senior members to view, edit and complete jobs instead of verbally doing it over a radio, therefore reducing airtime. The Sergeant on duty would also have multiple tasks on their device list and could directly communicate via mobile (work mobiles are already implemented) by adding a priority of response to the job based on units already in attendance, any further equipment needed and the option to downgrade a priority if the job the service/s attended ascertained that there is a miscommunication, and another service is no longer required.

This would however require the need for a forward commander to electronically sign off on a job being deleted from the task list upon completion with the guidance of the most senior member on scene.

TOOLS AND TECHNOLOGIES:

The software is already described as mentioned below, however this application would not require a great deal of coding implementation as it would work like other already similar messaging systems however the point of this would be to have every job colour coded to assist everyone involved. The system would require a central dispatch system that would output colour coded messages to the receiving device. Open-source tools such as Cyphon or Openbroadcaster would be a very good example of how this service could be implemented.

Skills required: A full development team that include representatives from all emergency services including the abovementioned and others not mentioned including mental health traumatic response units to give advice on certain features.

Software: Depending on the platform, the software would need to be available on all platforms however Android would be preferred due to the adaptability of its content. The languages used would be something solid such as C# on a modern .Net Framework on the back end with React.js on the front end.

Special hardware: Police already have access to a mobile device in addition to the issued radio which is designed purely to issue jobs. This does not give us the full job details and is more of a convenience if we need to check the address we are attending and provides police with the location of any other local units in the area via Global Positioning Systems (GPS) tracking in case we get in to trouble. This existing mobile device could be use and only Victoria police have this device however together, services mentioned would already have, or also need an interface that would meet similar specifications. It would need to be durable, waterproof (if possible) and where possible utilise the existing product already in service to handle an application of this type. It is safe to say that there are already enough platforms owned to implement this application however having something integrated between all emergency services at once would benefit everyone involved. Just ask!

OUTCOME:

The outcome of this project, if implemented correctly, would increase response times with less use of the central communications system already put in place which causes a lot of confusion with what details are included in the job and what is exactly needed to perform and complete the job efficiently.

Side notes to consider: The operators at ESTA can focus on priority jobs. They are efficient and some of the best communicators in what they do. They would not be replaced; they would simply spend more time making the most of their skillset by giving more detailed descriptions of the tasks listed on the interface.