Austmine STEM METS Career Pathway Program
Post Program Interview

Ahmad Amoun, Masters of Engineering (Mechanical), QUT | Intern at Russell Mineral Equipment

What drew you towards applying for the Austmine STEM Program? In particular, why did you apply for your current internship position?

The reason why I applied for Austmine STEM Program is due to my interest in the mining research and development projects and the new technological advancement in this sector such as mine automation. The reason why I applied to Russell Mineral Equipment is that RME is a leader in the STEM field, and they offer a wide range of technologies and products such as THUNDERBOLT SKYWAY and Mill Relining machines.

Do you see yourself as having a career in this sector? Has your view towards the sector changed since prior to your internship?

Coming from an Oil and Gas dependent country, I didn't know a lot about the mining sector and the career opportunities and career development that I might get as a mechanical engineer. However, after completing two mining-related work placements and internships, I am excited to take a career in the METS sector after graduation.

What key skills have you learnt through your internship that you feel are transferrable for future roles?

Time management and project management are two essential skills I've learnt through the internship.

What task or experience was particularly memorable as part of your internship?

Every day of my internship is a memorable day. I enjoyed everything I did and learned, from designing Mechanical components to assembling Thunderbolt recoilless hammers, PowerPacks and MRMs. One of the hilarious and memorable moments was during the secret Santa gift unwrapping and how everyone was trying to steal the nerf blaster.

What was the biggest challenge you faced during your internship and how did you overcome this?

There were no significant challenges faced during the internship. However, in the first two days of working in the assembly line, the only difficulty I faced was finding tasks to fill my time. I was able to overcome this by offering help to other colleagues and by requesting additional tasks when assigned tasks are accomplished.

Would you recommend the Austmine STEM program to future students?

I would highly recommend the Austmine STEM program to all future students in all majors because it is a well-planned and professionally managed internship program. I would also recommend the program because, in addition to the well-planned internship, there are Austmine webinars that are focused on the professional development of the interns, which is very helpful during studies and after graduation.

Do you have any further comments you would like to make about the Austmine STEM Program?

The program and the team behind it are amazing, and I would like to thank everyone behind this successful program and other successful programs. I would like to see Austmine connecting students with companies who are looking for students doing capstone/graduation projects units. This Research scholarship will be beneficial for both students and companies.

Thank you to host company:

RME RUSSELL MINERAL EQUIPMENT

Austmine STEM METS Career Pathway Program
Post Program Interview

Demi Li, Bachelor of Engineering, The University of Queensland | Intern at Intov8

What drew you towards applying for the Austmine STEM Program? In particular, why did you apply for your current internship position?

I applied for this program mainly because it is STEM based. STEM has been my interest since primary school. Initially, I was purely interested in numbers. As time progressed, writing software programs has been my interest as well, so I thought Austmine STEM Program is a great opportunity for me to demonstrate my abilities and make positive contributions both to the company and the industry.

My role at Intov8 was junior software engineer, this role attracted me because it required me to work closely with data. I was very interested to see how Intov8 uses technology to simplify the processing of data and how data can help us make decisions. It turned out that they are doing something wonderful to help the industry cope with large amount of data, which indeed increases the productivity and efficiency. Aside for the technical aspects, I was also very keen to improve my customer service skills.

Do you see yourself as having a career in this sector? Has your view towards the sector changed since prior to your internship?

Yes. I have always wanted to work in the METS sector. Australia has been the global market leader in METS, with the most advanced technology platforms. I believe working in this sector would offer me the greatest opportunities to apply my STEM knowledge and challenge me to gain a deeper knowledge about the technology systems. My view towards the METS sector is that there are a lot of unknown possibilities and challenges and you have to keep learning to keep up with the industry. Overall, my view towards the sector did not change.

What key skills have you learnt through your internship that you feel are transferrable for future roles?

Attention to detail; Critical thinking; Analytical and problem-solving skills; Troubleshoot and debug; Team work; Communicate effectively with the person in charge.

What task or experience was particularly memorable as part of your internship?

The most memorable experience in this internship would be working with the people at Intov8. Before the internship started, I thought working in a professional environment might be stressful and people just work independently. After I started the internship, what I thought was definitely not true. My co-workers are very hard-working people, they do their best for the company. They support each other to solve problems and concerns. I got a lot of support from them as well, which helped me learn and grow faster. They have good sense of humour and they encourage people to be themselves. I think this is why the working environment is relaxed and people are more innovative as well.

What was the biggest challenge you faced during your internship and how did you overcome this?

The biggest challenge would be that I had to get familiar with the products/systems in a short period of time. When I started this internship, although I did some preparation in advance, I was a bit overwhelmed about the amount of knowledge I have to take in. However, my co-workers were very happy to do training and small knowledge transfer catch ups to help me learn a lot quicker, which I was very grateful for. I think it's also important to take notes (even small points) of what they say and always recap on the stuff they taught. The final step would be to practice a lot to get familiar with the process.

Austmine STEM METS Career Pathway Program
Post Program Interview

Would you recommend the Austmine STEM program to future students?

I would recommend the Austmine STEM program to future students for sure. This program offered us great opportunities to apply our knowledge to real-world situations, to interact with the professionals in the STEM fields and to help us transition smoothly into the workforce. Since it was my first internship, the ongoing support provided by Austmine definitely helped me relieve the stress and fear and gave me motivation to step out of my comfort zone and challenge myself to do all sorts of new things.

Do you have any further comments you would like to make about the Austmine STEM Program?

Overall, Austmine STEM Program is a well-organised program for helping students gain more real-world experiences. I am absolutely grateful for having this opportunity to participate in the Austmine STEM program and work for Intov8.

Thank you to host company:

intov8

Austmine STEM METS Career Pathway Program
Post Program Interview

Hanne Newman, Bachelor of Environmental Science and Management, University of Newcastle
Intern at Geological Survey of NSW

What drew you towards applying for the Austmine STEM Program? In particular, why did you apply for your current internship position?

I wanted to gain practical experience, and put the knowledge I have learnt at university to use in a professional workplace. The Austmine STEM Program had a large variety of internships to choose from. I was drawn to the position that I chose, at the Geological Survey of NSW because I am interested in working at the Department of Planning, Industry and Environment, which encompasses the Survey. I felt that I was qualified and possessed the skills to succeed at the role I chose, so I was confident I had chosen the right one.

Do you see yourself as having a career in this sector? Has your view towards the sector changed since prior to your internship?

Yes. I personally see myself participating in the rehabilitation of the mines, or helping to ensure that this sector is safe and sustainable. I loved my internship and would love to keep doing that kind of work.

What key skills have you learnt through your internship that you feel are transferrable for future roles?

I have learnt valuable skills such as data management, using software such as ArcGIS and QGIS, and reading, interpreting and assessing complex documents. I also gained a greater understanding of what is done in a real workplace, outside of a classroom.

What task or experience was particularly memorable as part of your internship?

An experience that was particularly memorable for me was a site visit out to a location near Scone, where we were shown how the AusLAMP project is being carried out through the geophysical magnetotelluric survey. We were able to see how the measurements are taken, and removed some of the equipment to be taken back out of the field. On this trip we were also taken out to visit some mines and the naturally burning coal seam of Burning Mountain.

What was the biggest challenge you faced during your internship and how did you overcome this?

I felt it was a very steep learning curve for me, as I had not learnt much of what I did at the internship from uni. I overcame this by always being eager to learn, listening to everything that people wanted to teach me, and taking lots of notes that I could look back over later.

Would you recommend the Austmine STEM program to future students?

Definitely! It was a fantastic learning experience for me, and I very much enjoyed the summer. I also made lots of valuable friendships with people at my workplace, and endeavor to keep in contact with them.

Do you have any further comments you would like to make about the Austmine STEM Program?

The Austmine STEM project was facilitated really well. The people at Austmine were very supportive and always willing to help. They ran lots of useful Webinars, which were great to learn how to make the most out of my internship.

Thank you to host company:

Austmine STEM METS Career Pathway Program
Post Program Interview

Joel Christie, Bachelor of Mechanical Engineering, The University of Queensland
Intern at Bluefield

What drew you towards applying for the Austmine STEM Program? In particular, why did you apply for your current internship position?

Primarily curiosity. I happened across an advertisement for the Austmine STEM program via my university and after reviewing a number of the companies offering this opportunity the position with Bluefield was of particular interest given the breadth of the work they contribute to. Providing asset management consultancy to the industry sees them providing insight into how to maximise output from many different types of assets including open cut, underground operations as well as fixed and mobile plants.

Do you see yourself as having a career in this sector? Has your view towards the sector changed since prior to your internship?

Absolutely. I have had no previous exposure to the mining or resources industry and as such my view towards the industry was quite naïve. Now at the tail end of my internship I can say I have a far broader and varied understanding of the work performed within the industry, particularly from an asset management standpoint which has provided some interesting ways of thinking about projects.

What key skills have you learnt through your internship that you feel are transferrable for future roles?

Of particular interest was an offer to participate in a project management workshop within Bluefield which has provided a number of useful resources and tools which I have already had the opportunity to utilise within my current line of work.

What task or experience was particularly memorable as part of your internship?

As mentioned above, the offer to participate in the project management program with Bluefield was a particular highlight of my time with the company. The workshop was run in a very engaging manner and employing the tools and skills within the work I was conducting was very rewarding.

What was the biggest challenge you faced during your internship and how did you overcome this?

A large portion of my internship was spent developing an asset management plan template for a client's stacker reclaimer with the intention to roll out the format to the remainder of the site's assets.

Would you recommend the Austmine STEM program to future students?

Overall, I found the Austmine STEM program presented a large number of opportunities for students to connect with the resources industry and would highly recommend utilising the established connections with industry and would highly recommend applying for the program.

Thank you to host company:

bluefield
simplifying compliance

Austmine STEM METS Career Pathway Program
Post Program Interview

Kazi Khubaib, Bachelor of Engineering, QUT | Intern at Interlate

What drew you towards applying for the Austmine STEM Program? In particular, why did you apply for your current internship position?
The internship position (Asset management Intern) aligned with my Engineering management degree and hence I wanted to gain some industry experience to convert my academic knowledge to real world applications.

Do you see yourself as having a career in this sector? Has your view towards the sector changed since prior to your internship?
Yes. I would love to continue in the mining sector. I see a lot of untapped opportunities in the mining sector in terms of technology. The internship program made this observation very clear and apparent.

What key skills have you learnt through your internship that you feel are transferrable for future roles?
I have learnt a great deal using asset management and machine learning skills for the mining industry. I have learnt a lot about electric motors which can be transferrable to a lot of future roles. I have also learnt how to work in an agile style of management.

What task or experience was particularly memorable as part of your internship?
Working as an SME for a client was very memorable. The leadership at the internship company trusted my knowledge and decision making which helped us achieve good results.

What was the biggest challenge you faced during your internship and how did you overcome this?
Working with mining industry for the first time in my life was the biggest challenge. I was not very familiar with mining operational styles and mining equipment, but a detail research on mining industry and mining equipment everyday for 3 months helped me catch up very quickly and overcome the challenges. My supervisor experience and his mentoring were very helpful too.

Would you recommend the Austmine STEM program to future students?
Yes, I would definitely recommend Austmine STEM program to future students because it is a very good learning opportunity in one of the biggest sectors of Australia. The internships are challenging which makes the learning experience even better. I learnt more in these 3 months of internship than what I learnt in 1 year of university.

Do you have any further comments you would like to make about the Austmine STEM Program?
I had a wonderful experience and I thank Austmine for creating such amazing opportunities.

Thank you to host company:

INTERLATE

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Post Program Interview

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Thank you to host company:

INTERLATE

Austmine STEM METS Career Pathway Program
Post Program Interview

Kriangkrai Waisurasing, Masters of Mining Engineering, UNSW | Intern at AMC Consultants

What drew you towards applying for the Austmine STEM Program? In particular, why did you apply for your current internship position?
As an international mining engineering student, I want to learn more and be a part of the mining industry in Australia. After being with AMC over the summer period, I have seen a lot of individuals doing mining jobs with a high level of expertise. It broadened my perspective of the mining industry.

Do you see yourself as having a career in this sector? Has your view towards the sector changed since prior to your internship?
My view about the mining industry has not changed, and I still in the pursuit of mining career. I have a clearer goal, which needs a lot of hands-on experience to do so.

What key skills have you learnt through your internship that you feel are transferrable for future roles?
I have learned how to manipulate a large amount of raw data by using MS excel and Deswik. I also learned how to visualize and analyze the results. It is super useful tools, and I am surely trying to keep learning and developing these skills.

What task or experience was particularly memorable as part of your internship?
Every task in AMC is memorable for me, because most of the tasks were new to me.

What was the biggest challenge you faced during your internship and how did you overcome this?
I have learned that both practical mining skills and communication skills are crucial. Not only do I have to know what exactly I am doing to conform to the objective, but also how to convey the results. I was struggling with both parts. I am now working on it.

Would you recommend the Austmine STEM program to future students?
I would definitely recommend the Austmine STEM program to every future student. The internship is a great way to learn things that university may not provide, which sometimes is the necessary skill set for the future career.

Do you have any further comments you would like to make about the Austmine STEM Program?
I would say thank you for the Austmine STEM program and AMC for giving me a very good opportunity and great moments.

Thank you to host company:

AMC consultants
mine smarter

Austmine STEM METS Career Pathway Program
Post Program Interview

Michael Gunawan, Masters of Science & Engineering, University of Western Australia
Intern at RCR

What drew you towards applying for the Austmine STEM Program? In particular, why did you apply for your current internship position?

During my time as a student, I always try my best to gain good exposure to every aspect the University has to offer, whether that is coursework, volunteering activities or club events. At the same time, I really want to find a relevant vacation work experience in the mining sector and that drew me into applying for the Austmine STEM Program.

After conducting some in-depth research on each of the student opportunity available in the Austmine work platform, I was quite fortunate to find a company that offers the knowledge of bulk material handling equipment and drafting & modelling software packages at the same time. That's why I have applied to my current position.

Do you see yourself as having a career in this sector? Has your view towards the sector changed since prior to your internship?

The METS sector will definitely be one of my main pursue options in the next 5 years. If everything goes well, I will be very satisfied to have a long-term career in this sector.

My view towards the sector changed in terms of the daily work scope & responsibilities. My initial assumption was that everyone has to work in the mine site every single day. But after working in the company for a few weeks, I realised that office design work is also a critical step in making the company to operate above expectation. A lot of my work was actually mechanical engineering specific and I was able to analyse better about the commonality & existing gaps between University & workforce.

What key skills have you learnt through your internship that you feel are transferrable for future roles?

The key transferable skill I have gained throughout my internship period is project management. Being able to immerse within the multiple aspects of project deliverables, drawings, standard specifications and supplier meetings would be beneficial when I need to encounter similar projects in the future, even if they are projects in different sectors.

Another key skill I obtained was the basic familiarization to FEM software. These softwares are particularly useful to analyse multiple loading cases that can potentially do to a structure and produce outputs such as associated stress/strain results.

What task or experience was particularly memorable as part of your internship?

The most memorable experience will probably be the 30 minutes lunch time period. No matter how busy my supervisor was, he always spends 20 minutes of his time to walk around the facilities with me. At the beginning of the internship, he used that time to explain all the mining equipment on-site so that I can have a better grasp of what we are designing for in the office. However, after a few weeks, I had the privilege to listen to some of his life experience as well, which I find it quite meaningful.

What was the biggest challenge you faced during your internship and how did you overcome this?

My biggest challenge was probably the occasional lack of proper guidance when I needed the most. As the office is always under pressure to deliver results, most engineers did not have the time to clarify my questions in detail. This is also one of the main differences between University & workforce.

You will have to be able to make the most of your surrounding environment effectively and try to approach the person when he's not that busy. Also, I think being able to obtain the answers yourself from the available resources is also a crucial part in tackling this problem.

Austmine STEM METS Career Pathway Program
Post Program Interview

Would you recommend the Austmine STEM program to future students?

I would definitely recommend the Austmine program to future students as the internships organized by Austmine are quite structured including progressive online trainings/webinars. In addition, Austmine has been doing a fantastic job in promoting mining technologies & linking students with reputable companies.

Do you have any further comments you would like to make about the Austmine STEM Program?

Austmine has made a significant contribution towards my early career and I hope more relevant opportunities will be accessible for the student community.

Thank you to host company:

RCR

Austmine STEM METS Career Pathway Program
Post Program Interview

Sachin Fernando Bachelor of Engineering / Computer Science, QUT | Intern at CRC ORE

What drew you towards applying for the Austmine STEM Program? In particular, why did you apply for your current internship position?

I wanted to experience working in the mining industry, I wanted to utilize my skills in a mining background. I applied for a position at Cooperative Research Centre focused on Optimising Resource Extraction (CRC ORE) since I was always interested in witnessing how a cooperative research centre operates. The Integrated Extraction Simulator (IES) Dashboard project offered in the CRC ORE vacation program was an area of interest to me. I also liked the idea of working on a software project that had relevance to the mining industry.

Do you see yourself as having a career in this sector? Has your view towards the sector changed since prior to your internship?

Yes, I do, I am more aware of the opportunities that are present in the mining industry and will consider having a career in this sector. After this internship, I have realized the crucial role the mining industry plays in modern society.

What key skills have you learnt through your internship that you feel are transferrable for future roles?

Ability to work in teams, listening skills, time management skills, organizational skills and research skills are skills I obtained that are transferable to future roles.

What task or experience was particularly memorable as part of your internship?

Developing CRC ORE's IES Dashboard application; a web application that visualises data relating to the CRC ORE's IES to IES users.

What was the biggest challenge you faced during your internship and how did you overcome this?

Learning about the Ext JS framework that was used to build the IES Dashboard. I approached this challenge in a multitude of ways. I asked help from supervisors and senior members of the team. I also engaged in a lot of self-learning, reading through Ext JS documentation and third party tutorials. I broke down large complex tasks into simpler tasks that made me better understand the framework. Most importantly I had to be motivated when encountering difficult problems when working with the framework.

Would you recommend the Austmine STEM program to future students?

I would recommend this program to other students. This program gives students the opportunity to work with great companies where students can gain experience and be ready to transition to the industry. In addition to the internship, the program provides access to a series of webinars which students will find very helpful.

Do you have any further comments you would like to make about the Austmine STEM Program?

I would like to thank the Austmine STEM Program team for making this program happen, I hope this program will continue providing students with wonderful opportunities as I have received.

Thank you to host company:

CRC ORE
Optimising Resource Extraction