

ENGINEER YOUR CAREER

Information from Industry for Student Engineers

<u>Aimee</u>

AUTUMN 2018

Downer Graduate Engineer Auckland University alumni

We are relocating our asphalt plant to Samoa, with additional components from Auckland and Queenstown for an upcoming project. Splitting my time between the two cities, I am working with a team to decommission and disassemble the plant for transport to Samoa.

> I will then go to Samoa and meet the plant on site at Faleolo and reassemble and commission it for an entirely new project scope.



DOWNER takes you places

We recognise that today's graduates want to gain experience, be challenged and take on responsibilities to strengthen their careers. This is why we call Downer's young professionals future leaders and work to support their development.

OWN YOUR FUTURE | www.downercareers.co.nz

Downer

Martin

Downer Graduate Engineer Auckland University alumni

I've been privileged enough to be working on City Rail Link Contract 1 as a Site Engineer. My next opportunity with Downer's Graduate Programme will take me to Vanuatu! I am extremely excited as this will be my first experience on a roading project, as well as my first engineering experience overseas.

That's the coolest part about being a civil engineer, seeing your work come to life and the part you play in the project – it provides a real sense of ownership.

PAT PEREIRA – CIVIL ENGINEER

My father and uncle are engineers so I wanted to rebel and do something different. I dreamt of becoming a fighter pilot, but as I grew I came to the realisation that this was unlikely to happen. I have always had a natural affinity for mathematics and this eventually led me to follow my family into engineering.

On leaving school I moved from Samoa to Auckland and, after weighing the options, decided that the best and widest career path for me was civil engineering.

Working at RILEY has taught me that engineering is far more than just number-crunching

On completion of my degree in 2013 I was fortunate to be employed by a large engineering consultancy where I learnt a lot, however, I came to realise that I was a small cog in a large wheel, spending most of my time deskbound, numbercrunching, and not really seeing the big picture.

Making the move to RILEY totally changed civil engineering for me. From day one I have worked closely with and been coached by senior engineers who encourage me to take ownership on a variety of projects.

Being quite reserved by nature, at first I found it daunting to be thrown in at the deep end, however, the support I received meant that I soon got used to site visits and liaising with clients, contractors, and councils, and now it is an aspect of the job that I really enjoy. Looking back on those early weeks I realise that I have gained an enormous amount of self-confidence.

Back in the office I am honing my report writing skills and learning a variety of different engineering software packages including 12d and HEC-RAS.



It is a good feeling to have support whilst not being micro-managed

The back-up provided by the civil team has definitely given me the confidence to make decisions, as I know there is a network of engineers happy for me to use them as a sounding board and to help me through any difficulties that may arise. It is a good feeling to have support when required, whilst not being micromanaged.

RILEY has a staff of around 80 across its Auckland and Christchurch offices. Because of its size I get to work closely with other disciplines such as geotechnical and water resource engineers, and the flat management system means there is very little in the way of hierarchy; from the MD down, there is an open door policy.

Civil engineering requires a mixture of technical expertise and the ability to listen and communicate.

Since joining RILEY I have learnt that a good civil engineer requires a mixture of technical expertise combined with the ability to listen and communicate.

I enjoy helping people and have become involved with the Futureintech programme – an Engineering New Zealand initiative that has enabled me to pass on my experiences and encourage students to consider civil engineering as a career. I also get back to the university from time-to-time, assisting on the RILEY stand at the Orientation Employment Fair and the Careers Expo.

In the future I would like to be involved with Engineers Without Borders – using the skills I have learnt at RILEY will definitely enable me to help others.

It's not all work. Whilst it is a busy consultancy, RILEY is also a fun place to work, with the added bonus of new and very comfortable offices in Takapuna. As well as regular Friday gettogethers and assorted games, puzzles and lively conversation in the lunchroom, there is generally a function such as a fishing trip, indoor rock climbing, or bowling to look forward to.

RILEY SCHOLARSHIPS

This year RILEY will award two Civil and Environmental Engineering Scholarships. Second year students can apply for a two-year scholarship to the value of \$5,000 per year for use in their third and fourth years. Similarly, third year students can apply for a scholarship to the value of \$5,000 for use in their fourth year. Scholarship recipients will be offered vacation work which, in turn, often leads to permanent employment. Check the University website or with the Scholarships office for further information.

www.riley.co.nz/Careers



MAKE AMAZING HAPPEN



Graduates – with their fresh thinking and passion for reimagining what's possible – are critical to our success.

AECOM has the people, technology and vision to create smart solutions for our clients' challenges:

- 90,000+ AECOM team members working in over 170 countries
- 3,500+ team members across Australia and New Zealand
- 20+ offices across Australia and New Zealand.

On every project and for every client, our talented teams pride themselves on big ideas, positive change, and on leaving lasting legacies that build communities.

Whether we're delivering city-shaping infrastructure or enabling clean and stable water supply to far-flung places many of us may never visit, our work makes a difference.

WHAT ARE OUR GRADUATE OPPORTUNITIES?

We are seeking applicants from a wide range of disciplines, including civil, electrical, environmental, geotechnical, mechanical, structural, building services and chemical engineering, as well as design, planning and program and cost management fields.

Our three-year Growing Professional Skills graduate program is designed to help you bridge the gap between formal education and the workplace. As part of the program, we work with you to develop a plan, set your goals, and the actions required to achieve them. We not only provide technical training and access to experts in the industry, but training in soft skills in line with our focus on effective communication, client service and building agility and resilience.

There are many opportunities for gaining exposure or experience on different projects, in different locations and with different teams. We are seeking graduates who want to try new things and expand their skills and knowledge. There are opportunities for rotations during the program, as well as opportunities once you have completed the program to apply for our Asia Pacific Young Person Exchange program, where you can gain 12 months' experience in one of our offices across Asia Pacific.

HOW WE SELECT

Your application for a graduate role will be assessed through a staged approach, including an initial application review, online video game testing (Gamification), video interview, and assessment centre/ face-to-face interview.

APPLY ONLINE

aecom.com/australia-newzealand-graduate-careers/

Applications close Wednesday 28 March, 2018.



MEET ONE OF OUR GRADS

I joined AECOM as a Graduate Power Systems Engineer. Through AECOM's graduate program, I've been able to pursue my passion for power system protection.

With some help and guidance from the power systems protection specialists here in New Zealand, I am currently working on a protection study for an island in the Pacific. I am originally from the Philippines, and working with AECOM I've never been more involved in the development of the Asia-Pacific region as I am right now.

As a global company, AECOM can open up a world of possibilities and opportunities, and I work with really friendly, smart and experienced leaders and co-workers. It is an exciting time to be part of such a great team and I feel like I am really making an important contribution.

> Marc Marquez, Graduate Power Systems Engineer, Auckland, New Zealand



Will you wait for the future to happen, or take a hand in shaping it?

Discover more about a career with EY

www.ey.com/nz/betterbeginsnow #FutureOfWork

The better the question. The better the answer. The better the world works.



Will you be the disruptor or the disrupted?

Could a job without borders lead to a career without limits?

At EY, we're embracing change, preparing our people for the unknown future by equipping them with the mindsets to leverage disruption to create opportunity. To build a better tomorrow for themselves, our clients and our communities.

Whilst technology is transforming work, the future of work relies on people with the ability to ask better questions. And every question we ask has the power to solve complex issues.

Whether your career lies in providing assurance services to leading companies, GST insights to entrepreneurial start-ups, transaction advice on public private partnerships or managing risk and capitalising on opportunities, you'll gain invaluable skills, experience and a lifetime of contacts that will set you up for a successful career – no matter which path you choose.

How will your ideas make the world better?

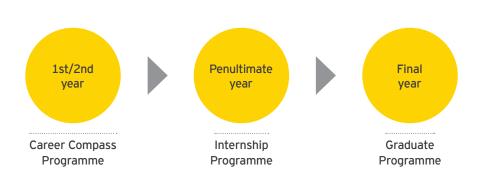


Meet Nikita Kabra Bachelor of Engineering (Hons) | University of Auckland

"I started my career with EY in 2016 and work in the Advisory team in the Technology space, specifically in Intelligent Automation (IA). I help businesses to improve their business performance using technology. Working in IA means I get to help them embed a virtual workforce in their teams, which are also known as robots! I help to identify tasks that can be automated, and then automate those tasks using a combination of specialist software and coding.

I studied a Bachelor of Engineering (Hons) specialising in Software Engineering at the University of Auckland.

One memorable project for me was working with a business in the engineering and infrastructure industry to assist with the implementation of IA into the Finance division as they were spending over 200 hours every quarter to compile a report that required manual checking and populating of data. We ended up setting up a functional virtual person on their IT



infrastructure that could complete the report compilation in under 2 hours. This allowed the Finance team to focus on more value add tasks such as interpreting the report, analysis and identifying trends that could help them improve their performance. This also led to increased employee engagement and satisfaction.

Technology advancements are constantly changing the way people work and digital disruption is a wave that is causing change in technology at a very fast pace. Digitisation of goods and services that were once majorly physical, for example ordering taxis or shopping, has led to a world where people want quick outcomes. Working in the EY Technology space helps businesses build a roadmap that will lead their business models to be able to handle the digital disruption. For me personally, this means helping them to build a workforce of the future which has teams including virtual people with IA to keep up with the fast paced industry."

For more information on how to apply, where you fit, how we develop you, life at EY and what makes us different, visit:

- ey.com/nz/betterbeginsnow
- in bit.ly/EYLinkedIn_CareersAUNZ
- instagram.com/eynzcareers
- facebook.com/eycareersnewzealand
- twitter.com/ey_careersaunz



Jacobs at a glance













First Look Scholarship Programme Information

In collaboration with the University of Auckland and University of Canterbury, Jacobs has a First Look Student Scholarship Programme. It has been in place for several years and is considered to be an immense success.

The programme offers successful recipients with summer work experience and typically results in the recipient being offered a graduate position at Jacobs.

In addition to the First Look programme Jacobs has a number of additional opportunities for Graduate engineers to join Jacobs.

APPLY HERE

Applications for our 2018 First Look Scholarship Programme opens Monday 19th February and closes on Wednesday 4th April.

Please visit the University of Auckland website, Scholarships and Awards Page and search **"Jacobs Power and Resources Scholarship"** and/or **"Jacobs Infrastructure and Environment Scholarship"** for more information.

Featured graduates



SARAH CROWHURST

I am in my second summer of work with Jacobs as part of the First Look Scholarship programme. During my first summer I was working in Wellington in the Building Services team. This summer I am in the Auckland office in the Structures team. While the work has been challenging it has been an amazing learning experience. I now understand many structural problems and design techniques, which I never thought possible to learn over a single summer.

What has also been fantastic about working at Jacobs is the team environment. No matter how busy everyone is they are always willing to help and support you. The team creates a character filled, fun and friendly environment which makes coming to work every day something to look forward to! I am looking forward to further grow and develop my skills and knowledge through the Jacobs First Look Scholarship programme next summer.

I studied Civil Engineering at the University of Auckland, and was privileged to be accepted by Jacobs into their First Look scholarship programme. My experience as a First Look Student truly opened my eyes to the almost endless career opportunities with a company as large and broad as Jacobs. As a First Look Student I worked on a vast range of projects, from the billion-dollar Central Interceptor sewer upgrade, to a small water supply upgrade in Tairua.

There were many major selling points for Jacobs that made me sign up as a Graduate. These include the opportunity to transfer between offices around the world, the array of extra employee perks, but most importantly, it was my colleagues that sold me on the job. Never have I felt such a sense of appreciation, inclusion and caring in a work place, even as a First Look Student and fresh Graduate.

Jacobs prides itself on its Diversity & Inclusion culture. Our value proposition is that by using embracing the views and experiences of many, we engage, inspire, develop and empower our people and drive world-class execution and innovation.



JONATHAN

LILEY





WENYU OUYANG I studied Civil Engineering at the University of Auckland. After I started working, I discovered how easy it was to change the direction of my career. My managers would give me a wide range of opportunities to widen my scope of knowledge and pick up new roles on projects. Jacobs has quickly put me up to challenges which have pushed me to take up more responsibilities and I have created strong relationships with my clients. Seeing projects go from development designs to real structures on site is the most thrilling part of my job.

I recommend Jacobs to those who are thinking of studying Civil Engineering, Jacobs wins major projects all around New Zealand, it is such a good opportunity to work alongside a diverse group of individuals with different skills, experiences and ideas to get a job done.

I joined Jacobs in 2015 as a First Look Student in the Wellington Water team. For my second summer in 2016 I chose the Auckland office and the Civil / Infrastructure team, which lead to me accepting a graduate role as a Civil Engineer starting in November 2017. The flexibility that being a First Look Student gives you is unparalleled as you aren't simply applying for a summer job, you are instead trialling your future career path and seeing how to get the best fit.

I am now developing my technical skills as a Civil Engineer specialising in stormwater on a major multi-modal transport project in an alliance with several other companies. I am loving the opportunities presented to me to work closely with Senior Engineers as well as other Graduates and intermediate level people, including ones from other engineering and construction firms.



ELIZABETH GARNER



MATTHEW MUNRO

I began working at Jacobs in the 2016-2017 summer, working in the Project Management team, helping to build new classroom blocks for schools in Auckland. In my second summer I worked in the Transport planning team. I got to work on largescale council and government projects building major state highways, light rail lines, and active mode infrastructure.

The Jacobs company culture is excellent, with ample opportunity to network and hangout outside of work with other First Look Students and full-time employees. Jacobs provides exciting future career development opportunities. Most First Look Students are offered a Graduate role at the end of their student programme, you also have the opportunity to transfer overseas to other Jacobs offices around the world. Jacobs also provides assistance with fees during your degree, which is a huge help. It's been an awesome place to work and I would highly recommend!

Updates from our 2017 featured grads...

ROBIN BRASA

As a returning First Look Student I worked in our Power section for the first half of this summer and I am now in London on a University Exchange for one semester.

RACHEL HOUSTON

I decided to relocate to the Jacobs Sydney office, to work on many projects of various scales, from small road upgrades to a tender for a section of the WestConnex Program of Works, which is currently Australia's largest transport infrastructure project. I have been fortunate enough to work with very intelligent and supportive senior engineers who have made my experience at Jacobs even more enjoyable.

JACK LEEVES

Over the past year I have played a key role in the delivery of an array of different projects. These projects varied from massive multi-milliondollar highway upgrades to small substation developments. I have continued to develop my technical skills and am well on the way to gaining all the experience necessary for my professional accreditation.

JOEL KAVENGA

I was previously a First Look Student and have recently joined Jacobs as a Graduate Structural Engineer. I cherish my time here and continue to do so thanks to the fantastic work environment that Jacobs possesses. A diverse and interesting range of projects and colleagues allows me to enjoy coming to work every day. Enjoying my job is the main criteria I wanted to have ticked, when I start my career. To date, I have been lucky enough to conduct work on projects as large and unique as a water adventure park and as close to home as seismic assessments of everyday houses. I can't wait for the further challenges I face as a graduate, as I continue to learn what it means to be a real engineer



र Robert **Bird** Group

Member of the Surbana Jurong Group

RBG recognises that Graduate Engineers are the future of our company, and we are excited to be given the opportunity to provide a positive learning environment that will challenge and reward.

"Do you want to be involved in real engineering projects and start designing from day one?"

Robert Bird Group, member of the Surbana Jurong Group, is a specialist structural, civil and construction engineering consultancy with over 500 employees across offices in Australia, New Zealand, the UK, the UAE and South East Asia.

The cornerstone of our mission of Good to Great by Design is the engagement, collaboration and continuous development of our people. Robert Bird Group continually seeks highly motivated and skilled individuals to join our global team.

Available Opportunities

Each year, Robert Bird Group offers Graduate employment, internships and work experience. In your role you will be encouraged to embrace diversity, work collaboratively and contribute to change. You'll be surrounded by global experts and you will be supported to develop and grow by:

- Building your technical skills through on the job learning
- Working with some of our most talented industry leaders
- Developing your career through experiences and opportunities
- Building a global network of people with diverse skills and experience
- Receiving on-the-job mentoring and coaching from industry leaders

We have a wide array of opportunties for gaining experience on a number of different projects in a variety of locations. We are seeking ethusiastic graduates looking to expand their skill set and knowledge.

Meet Graduate Ben Cane

"After the completion of my final year at the University of Auckland I was thrilled with the chance to start working for Robert Bird Group. With a brand new Auckland office in a small but advancing work environment I was excited to begin my career here.

Since starting at RBG I've relished in the opportunity to learn from specialist engineers, as an aspiring structural engineer the guidance and support provided has been second to none. New learning opportunities present themselves around every corner and as RBG is continuing to expand throughout NZ, I'm looking forward to being involved in tackling oncoming large scale engineering projects.

Currently I'm being exposed to a wide range of structural engineering applications and I have been able to apply University teachings from the lecture room into the industry. This includes incorporating the knowledge attained to aid in the structural design of temporary structures for a high-rise tower building being constructed in Auckland over the next 3 years.

If you are looking to thrive in a challenging but rewarding environment within a team of friendly and diligent specialist engineers with the opportunity to gain experience in civil engineering disciplines along with international work exposure, I definitely think RBG would be a great suit for you".



WorleyParsons is a dynamic company working across a diverse range of industries delivering advisory, engineering, procurement, project management and construction services to our customers across New Zealand and internationally. From consulting on a single project or issue through to delivering some of the country's largest and most complex projects and plants. We pride ourselves on our ability to understand problems, solve them and deliver solutions to our customers. WorleyParsons NZ designs, builds and maintains industrial plants within a wide range of industries including power generation, oil and gas, refining, petrochemical, dairy, food and beverage, forestry and mineral processing industries.



With office locations in Whangarei, Auckland, Hawke's Bay, New Plymouth, Wellington and Christchurch we employ over 450 staff. We are supported by the world class expertise, systems and training of our global business which spans 42 countries. WorleyParsons has an industry leading approach to diversity, inclusion and flexible work.

Our Graduate Development Program offers our graduates an unparalleled breadth of experience with which to begin their professional careers. Not only will you spend time in the office designing solutions, you'll be able to follow this up by implementing and testing your solution on site. New graduates will have opportunities to procure and inspect new equipment, receive both general and personalised training and experience secondments into client offices.

The graduate program functions as its own project, with its own budget, execution plan and leadership team made up of graduates. It provides opportunities to all members including:

- Providing guidance and support through a mentoring program.
- Offering unique experiences including site visits and a yearly graduate trip to different locations around New Zealand.
- Leadership and management experience; running graduate recruitment, organizing social events and choosing and developing training programs for your fellow graduates.
- \cdot $\,$ A path to Chartered Professional status.

WorleyParsons is looking for applicants with creativity, drive and great communication skills. We hire engineers from many specializations including the process, mechanical, electrical, mechatronics and structural disciplines.

www.worleyparsons.com



Rebecca Ward, Graduate Mechanical Engineer and Graduate Development Program CEO NZ

I started working for WorleyParsons in our Auckland office as a summer student, before being offered a Graduate role on the completion of my BE (Hons) – Mechanical in 2015. Like most graduates in WorleyParsons NZ, I started working in our head office in

New Plymouth. I had never been to New Plymouth before starting working there, I didn't know what to expect. I quickly grew to love the place. It has a lot going for it, with endless outdoor activities, whilst being in the heart of NZ's Oil and Gas industry. With most of our graduates starting off in New Plymouth, there is a large presence of young professionals – this is always good for our quarterly challenges against the Senior Leadership Team as a part of our Graduate Development Program.

Having offices in various locations across NZ, there are often opportunities for graduates to move locations and gain a range of experience. I now work out of our Hastings office, where I have been involved in a range of projects across a range of industries such and the Food and Beverage and Heavy Industries.

WorleyParsons has provided me with opportunities to learn and develop as a graduate. Being surrounded by highly skilled project and technical engineers across a range of specializations, there is always someone who is willing to share their knowledge with you.

Like what you hear? Look out for our University of Auckland information evening to learn a bit more about us. Applications for our 2019 graduate program will open in April. Further information on WorleyParsons is available on the Internet at www.worleyparsons.com and www.advisian.com.

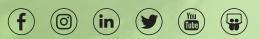


Unconventional

We believe it will take a diverse set of attributes and skills to compete in tomorrow's world.

Are you inquisitive - fearless - engaging resourceful - co-creative - commercial a sense maker or an unconventional thinker?

These are the attributes we look for. They are how we develop our people and how we stand out from the crowd.



aurecon

Bringing ideas to life

Who are we?

Aurecon is a global engineering and infrastructure advisory company.

As engineers and advisors, we blend what is with what might be to create what is possible. Using innovation and design, we bring our clients' ideas to life to shape the future.

Complexity inspires us. Ambiguity energises us. We believe that together, we'll solve some of the world's most complex problems. All that's needed is to start seeing the world differently, today.

At Aurecon, we are passionate about partnering with our clients, and believe that our diverse and inclusive workforce drives innovation. In 2017, we were honoured to be named 'Large Firm of the Year' by Consult Australia, and we were ranked #5 in the Australian Financial Review's Most Innovative Companies list.

Our graduate programme

Aurecon has challenged the traditional approach to graduate programmes, creating an environment where you can pursue your personal career interests, instead of being locked into a rigid rotation schedule where you spend several years in different areas of the company.

At Aurecon, you can express your interest in a preferred team, play to your strengths, and fast track your experience and development. You will also work alongside industry leading professionals, mentors and peers. If you'd like to experience numerous areas of Aurecon's business, then we can facilitate that too.

Bringing ideas to life at Aurecon is about being creative, grabbing onto new opportunities and getting the support you need to find your niche.

Apply now

Visit: www.aurecongroup.com/graduates Graduate applications close: 17th March 2018 Internship applications close: 21st June 2018



Cass Kenworthy Transportation Engineer

Location: Auckland, New Zealand Time at Aurecon: 4 years Degree completed: Bachelor of Engineering (Civil) Hons, University of Auckland Strongest Aurecon Attribute: Engaging

I pursued a career in engineering after realising my passion for mathematics and complex problem solving while studying biomedical science.

During my Honours year of my Bachelors degree, I completed an internship at Auckland Transport where I worked on various bus and rail projects with several design consultancies, including Aurecon. I applied to Aurecon's graduate programme because I thought they were one of the most engaging consultancies. I also appreciated that to be a good engineer, I needed experience working in a consultancy environment.

Unlike similar organisations Aurecon doesn't have a formal rotation programme, which means you can focus on your area of interest from the outset. Over the years I have been given the opportunity to contribute to many multimodal projects within the transport planning team.

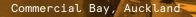
Being able to articulately communicate and the ability to work with a diverse range of people is an important skill to develop as an engineer. I believe that my strongest Aurecon Attribute is "engaging", which has helped me significantly to get my projects over the line.

A key achievement for me is being selected as Global Chair for "Limelight"- Aurecon's emerging professionals' programme that aims to promote a culture of innovation, involvement and improvement. In this role, I supported Limelight committees across our operations and facilitated global events to encourage emerging professionals to help bring ideas to life.

I encourage aspiring engineers to gain as much relevant work experience as possible while studying. This helps to get your foot in the door when applying for jobs and gives you an advantage.

Aurecon has a great reputation in the market place. Hearing complimentary feedback about its work and people is a great motivator for me - I feel proud to work for such a highly regarded consultancy. "We've got a real focus on quality, so working at Holmes inspires me on a daily basis to be the best engineer I can be."

Holly Wright



Engineer Your Career



As a small child I could always be found at the kindergarten woodwork table, building whatever I could think of, with whatever materials I could get my hands on. Growing up, I continued to build, using anything I could find in my Dad's garage. I made go-karts, skateboards, timber huts—if I could dream it up, I'd always give it a go! At high school, I had a knack for maths and physics, and I wanted a career that could combine both. Structural engineering fitted the bill. It's the perfect combination of number crunching, problem solving, and thinking up creative solutions. At university, getting into structural design was a no-brainer for me: the work is so real, so necessary for the ever-evolving world, and something that is seen, used, and appreciated on a daily basis.

DAY-TO-DAY AT HOLMES?

There's never a dull day at Holmes! As a graduate, I was given real engineering work from the get-go, which really got me thinking and taking on responsibilities. I get to work alongside people of all levels of experience and expertise, who provide an excellent network of support, so you always feel like you're making informed engineering decisions. I get to collaborate with architects and contractors daily, and work on some of the most exciting projects around!

WHAT'S COOL ABOUT YOUR PROJECTS?

I've been given the reigns on the design of an extension to an existing building at a university campus. It is a real thrill having my own project to work on. I am carrying out all aspects of the design, from the foundations, to the lateral resisting system, to the detailing of the connections, and everything in between. In the past year I have worked on a number of projects, including a high profile retail development, where I designed a fair amount of the new roof connections. I also worked on the gravity resisting system and roof detailing of the South-East Tenancy in the Commercial Bay Project.



LIFE AT HOLMES

I really look forward to work! Everyone is friendly, encouraging, and willing to help. We've got a real focus on quality, so working at Holmes inspires me on a daily basis to be the best engineer I can be. Everyone here gets on really well, so there are always fun things going on during and after work. We go surfing, play netball and football, do bootcamp (not really fun!), and there's a run club a couple of times a week. We've also got a great social life, with organised events and general catch-ups in the lunchroom day-to-day.

WHERE ARE YOU HEADING?

In the immediate future I want to continue to develop my technical competencies, so I can increase my level of independence as an engineer. I really enjoy working with the clients and architects, so I'm keen to get in to more of that as I progress as well. My wishlist includes working on an arts-focused project: a gallery, a theatre, a performance venue. Luckily, with Holmes plenty of opportunities pop up! Down the line I'd also like to work overseas-Holmes has offices around the world, including San Francisco, Los Angeles and the Netherlands. It's all exciting.

Join us at the Auckland University careers evening on Tuesday, 13 March 2018, or apply for graduate or summer intern positions at **www.holmesgroup.com**



BUILD YOUR FUTURE ON SOLID GROUND

VITH AN INTERNSHIP AT McCONNELL DOWELL

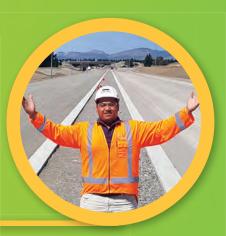


Alex | Army Bay wastewater pipeline, Whangaparaoa

"The practical site experience I picked up this summer will prove to be invaluable. Being assigned to one project for an entire summer helps with learning about day to day operations on a project. On my project (which is also a New Zealand first) I got awesome insight into how tunnelling work is carried out."

Anthony | Russley Rd and CSM2 highways, Christchurch

"The internship was a really good experience. I got to see all the work done behind the scenes in the site office, and the site engineers were always happy to have me tag along with them on to site to see what goes on. Everyone was friendly and willing to help – it was obvious that they wanted me to enjoy my time and experience all parts of the project."





Anastassiya | City Rail Link tunnel, Auckland

"I've really enjoyed every single day. I was given a range of work that helped me understand and apply knowledge from university to reallife work, as well as gaining huge new experience and skills that are only possible to get from actually working on site. I think the most useful part was having to collaborate with people all over the team, which helped me to be more confident about asking questions.'

Like a good construction project, a great career takes structure and planning. So when it comes to constructing a new career, you'll want the best foundations you can get. Do the ground work on a McConnell Dowell summer internship and your three months of project site experience could fast track you straight into a graduate job.

Graduate applications open in May, internship applications open in June at www.mcconnelldowell.com.

Meet us at the Engineering School Careers Day on 17 April 2018.

M°CONNELL DOWELL CREATIVE CONSTRUCTION™

You Tube Linked in

WANT TO WORK FOR A COMPANY THAT CREATES SOFTWARE FOR THE WORLD'S BEST CINEMAS?



Vista Entertainment Solutions is the world leader in cinema management software; our set of integrated and scalable software modules are installed in cinemas all over the world. Our mission is to enhance the cinema experience for all.

Our success is directly linked to our employees' success. We have a loyal team, with many being part of Vista for more than a decade. We offer a collaborative workplace and encourage staff to share their views and experiences. With offices in Auckland, Los Angeles, London, Cape Town, Mexico City, Beijing and Shanghai — and software installed in more than 80 countries, Vista provides a wide range of opportunities for career growth and travel.



HERE'S WHAT OUR GRADS HAVE TO SAY...

If you could be a movie character, who would you be – and why?

Sam: Alfred, Batman's butler. Full access to the Batcave, trusted completely by Batman himself and a fraction of the personal danger.

Connor: My first thought was to be Harry Potter but it would be a hassle to have so many enemies, so I'd go with Hagrid as he's got some awesome pets. Oh, and magic would be pretty handy too! Spells to fold laundry and do the dishes?!? Come on.

Nazish: I'd be Aman from Kal Ho na Ho (Bollywood movie). He's a fun and loving individual who lights up the world for others around him, despite his own struggles.

Why did you choose Vista?

Sam: Vista works in one of the most interesting industries, cinema and film is always a topic that gets people excited. Seeing the culture and the people that make up the company just sealed the deal.

Connor: I saw huge potential for professional growth and the chance to build the foundations of my career. I was also looking for a good social environment and Vista has blown all my expectations out of the water.

Nazish: Movies are magic, they transfer you into another realm. Vista enables audiences to experience that magic in their daily lives, in an interactive and user-friendly manner.

Tell us about your role...

Sam: I'm a developer in Vista's API team. Our product connects various Vista products (such as loyalty and gift cards), allowing their functionality to be accessed by cinema websites around the world. **Connor:** I'm also a developer. We work in an Agile environment – knowing what your teammates are working on and what's on the horizon has helped me to understand the bigger picture. Being relatively new I thought it would be great to broaden my knowledge, my day-to-day tasks involve a range of frameworks and languages such as .Net, SQL and VB.

Nazish: I'm a Software Services Consultant for the UK team, serving as the link between our customers (cinemas) and technical staff at Vista. A normal day at work includes lots of problem solving, critical thinking, and teamwork.

If you could go back and give your studentself some advice, what would it be?

Sam: Go to more of the events on offer earlier and get to know some of the people you're going to class with sooner. There are a lot of friends to be made at university and that won't happen unless you get out there to meet them.

Connor: Study a field that you enjoy. Sure, you may not like every aspect of it but finding an industry where you will obtain job satisfaction is huge. For me it's the problem solving aspect — I love being constantly challenged. If you choose right, then motivation will come easily and you'll definitely go further.

Nazish: Work on exciting, challenging projects in your own time. Completing something meaningful in your leisure time is a great achievement, and it gets appreciated at Vista.

Vista has grad and internship opportunities for Developers, Test Analysts, Services Consultants and Business Analysts.

Applications will open in April 2018. Visit www.vista.co/en/careers for more information.



Abby Wake-Mayo Geotechnical Engineer



How did you get the job at T+T?

During my first year at university I met a civil engineering student in the year above me who had received the T+T scholarship, completed his internship there and had really loved his time there. Following his advice I applied for multiple scholarships in my second year, including the T+T scholarship, which I was awarded. This scholarship offered me both financial support in my studies and the opportunity to intern with T+T during my summer holidays. Through the internship programme I was able to experience what the world of geotechnical engineering is all about and decided this was the area I wanted to specialise in. During my final year I worked part-time at T+T and applied for a full-time graduate position which I accepted.

What do you actually do?

As a geotechnical engineer I'm concerned with how the soil is behaving and how to ensure the proposed structure is stable. To achieve this I have to design an engineering structure or system which interacts with the soil. This can include anything from foundations design, retaining wall design, slope stability to landslip remediation to name a few. The best thing about being a geotechnical engineer is that no two jobs are the same because the soil is not linear in its behaviour or properties and every problem requires a combination of lateral and logical thinking. For this reason my job includes both: time in the office – writing reports, doing analysis using computer software and doing calculations, and going out to site - undertaking investigations or observing construction.

It's hard to describe a typical week because I often have three to ten different projects on the go, all at various stages of development, which require a lot



of flexibility. I might be in the office for some of the day and then out on site for site investigations or construction observations.

How has T+T supported your career?

The internship programme was an invaluable opportunity to learn the practical side of geotechnical engineering, which I would never have received at university. This allowed me to put into practice what I had learnt at university in an environment where I was supported and had time to understand the engineering principals, which really set me up for my graduate role.

At T+T there is a very strong collective thinking culture, facilitated by the open plan office arrangement and jovial atmosphere between colleagues. This often means someone will hear you discussing an issue and offer to help or point you in the right direction, which makes asking questions and getting different perspectives on a problem really easy.

What's the best thing about working for T+T?

The best thing about working at T+T is both the diversity of interesting projects and the culture. During my time at T+T I have become good friends with a large number of staff, which makes coming to work every day enjoyable.

What advice do you have for current students?

Take initiative and always ask questions if you don't understand something because there's never a wrong question, only wasted time.

Exceptional thinking together www.careers.tonkin.co.nz

Make a positive impact on the **environment** and your **community**



We value collaboration and the union of engineering design & nature.

KYLE IS A VALUED ENGINEER IN OUR OPERATIONS TEAM

Kyle Fredrick

BE (Hons)

How did you start working at Morphum Environmental?

I initially started working as an Assistant Engineer, working part time whilst studying for my Engineering Degree at Auckland University. Over the summer holiday's I was able to work full time, which was a great way to get immersed in project work and gain valuable practical experience. Even though I hadn't quite finished my degree, I was offered a full-time position with the understanding that I would complete my study in my own time. Morphum was very supportive and flexible in allowing me time to accommodate my study and complete my qualification.

Why Morphum Environmental?

I have a personal interest in the environment, in particular the conservation of New Zealand's beautiful freshwater and marine ecosystems, and liked the strong link Morphum has between engineering and the environment. It's great to be able to make a difference to the community and environment, through the work I do. Morphum is a smaller team, which appealed to me, as well as the fact that they value sustainability and are leading positive environmental changes in the industry and across their networks. ⁶⁶ I particularly enjoy the project work I'm involved in, it has lots of variety and is beneficial to the environment, which is important to me. My hard work is appreciated, I've been nominated for the Morphum Mauri Award a few times, which recognises employees who have demonstrated the Morphum values. I recently won the Award, receiving a restaurant voucher to enjoy. **99**

What opportunities have you had at Morphum Environmental?

With Morphum being a smaller team, you get the opportunity to work on a wide range of projects, and collaborate with different teams. For example

stream walking with the science team was something that I never thought I would be involved with, and have enjoyed the variety and learning opportunities it offers. I have learnt by being thrown in the deep end, all whilst being supported by experienced mentors.

Through my project work on water supply and wastewater projects in regional parks, I have been lucky to visit some beautiful remote spots in Auckland. I've also had the opportunity to work with Auckland Council on secondment, learning the industry from another perspective.

What do you enjoy about your workplace?

The culture – it's friendly, cohesive and family– like. Everyone is social and easy to talk to, even the Directors. Morphum has a fun, active social club, we have regular Friday night outings, a soccer team and enjoy getting together for a wide range of social events. It's a great way to make connections with colleagues outside the work place, and makes the team gel. Colleagues are now long-time friends, some of which are on the other side of the world.

Contact us today regarding current and future opportunities www.morphum.com/careers

Our Branches: Auckland | Warkworth | Hamilton | Wellington | Nelson | Melbourne



AUCKLAND TRANSPORT



A place where Engineers choose their own path

At AT, we're on a mission to help make Auckland one of the world's most liveable cities. Delivering major infrastructure, planning public transport systems and developing networks to reduce our city's carbon footprint; we drive our city further into the future every day. To continue doing that we need more creative, innovative thinkers and doers. Sound like you?

We're an organisation all about the future, comprising specialist divisions that collaborate closely to save Aucklanders time and keep them moving forever forwards. And we're committed to making this journey open and involving – giving people the information they need, and constantly seeking their opinions and feedback.

Our Infrastructure team investigates, designs, constructs and maintains some of the most innovative and high profile infrastructure projects in New Zealand. Our Transport Services and Transport Operations team gives thousands of hours back to Aucklanders each year by keeping public transport on the move. Our Strategy and Business Technology teams forecast, plan, and guide our decisions for the future. It's an incredibly varied place to be and gives our people the chance to really make their mark on their city.

The Early Career Programme

We recognise that variety and opportunity is key when embarking on a career, that's why we're doing things a little differently with our new Early Career Programme;

Rotations

You'll have a home base in one of our divisions, but to keep things moving and interesting, you'll rotate through other divisions every four-six months. This will give you the experience, insights, understanding and network to shape your career for the future.

Learning

If you'd like to step up your learning in a certain area, we'll give you the time and financial support you need. We know that if you're moving forward, we will be too.

Paying It Forward

You'll have the opportunity to use the skills and experience you've gained on behalf of a not for profit organisation on a two week project that will make a positive difference to communities here in New Zealand, or across the world.

How we select

We like to do things a little differently at AT and we want the recruitment process you go through to reflect that. We'll need to do the normal stuff like a CV, Cover Letter and your Transcript (but we'd love you to try and stand out!), but we'll also get you to do some online gaming and design and develop real products in real time!

Dates

Applications will open in April and we'll offer positions as we go, so please get in early to ensure you don't miss out!





Daniel Kuruppu BE Hons (Civil)

I started with PDP as an intern over the 2015/2016 summer, in the Water Infrastructure Group.

One of my first jobs involved determining the optimal position of water intake screens and calculating the velocity of water through them to ensure fish wouldn't be adversely affected by the water intake operations at the site.

It was great to be able to work on a real job to see how things are done in the industry.

OPPORTUNITY GROWTH

At the end of 2016 I came back to PDP as a graduate. Since then, I have been involved in a wide range of work which has included:

- Carrying out an options assessment for a leachate management system on a landfill
- Designing a hydraulic model for a large wastewater reticulation scheme
- Writing an assessment of environmental effects for a high ammonia waste stream that would be discharged to land

As PDP is a medium sized company, there is a good range of projects which vary in size and type to ensure you are never bored.

Everyone I have met at PDP is friendly and approachable. If you ever run into issues with a project, there is always someone close by who is happy to help.

I would recommend PDP to anyone who wants to develop their engineering skills quickly, tackle interesting problems and take on responsibility.

ABOUT **Pop**

PDP is an engineering and environmental consultancy with over 30 years' experience providing environmental solutions throughout New Zealand, Australia and the Pacific Islands.

We are a New Zealand owned company, our shareholders being PDP employees. We have over 100 people nationwide, working in Auckland, Tauranga, Wellington and Christchurch. At PDP you will be working with high-calibre colleagues who are recognised as leaders in their field - Civil and Environmental Engineers, Scientists, Planners and other professionals.

We have a supportive, collegial culture where the contribution of our people is respected and valued.

To find out more about what we do, go to pdp.co.nz

Talk to us on campus at the Auckland STEM Expo on 17 and 18 April

To learn more, come along to our Presentation Evening on Tuesday 24 April at 5:30pm in Room 423-342

APPLICATIONS CLOSE 31 MAY 2018

APPLY ONLINE pdp.co.nz/careers



HUAWEI TODAY

Huawei is now the world's largest telecommunications vendor, employing over 180,000 people, operating in more than 170 countries with 16 R&D centres, 36 Joint Innovation Centres, and 45 Training Centres.

Today, almost half of the world's population is connected over Huawei technology. Sales revenues in 2016 reached US\$75 billion, a year-on-year increase of 32 percent. Huawei is ranked 83rd in the Fortune Global 500 and was the first Chinese company to make Interbrand's Top 100 Best Global Brands list.

R&D Focus

More than 80,000 people work in the company's R&D department (almost half our staff). In 2016 R&D investment exceeded US\$11 billion and Huawei is committed to continue investing over 10 percent of its revenue in R&D, well above average for technology companies.

The Huawei Innovation Research Programme (HIRP) has worked with over 1,000 scholars and provided financial support to over 1,000 postgraduate students across 300 universities in over 20 countries, including New Zealand.

In 2017 the HIRP funded over 100 new research projects.

Huawei New Zealand

Huawei opened its first NZ office in 2005, partnering with what is now 2degrees and iHug (now part of Vodafone).

The local office has since grown to more than 150 full time staff, led by CEO Yanek Fan, serving all of NZ's major mobile and fixed line broadband providers, taking on a key role in the Governmentbacked Ultra-Fast Broadband (fibre) and Rural Broadband projects, retailing a wide range of smartphones and other consumer devices, and launching Huawei Enterprise to support local businesses. In 2017, during a meeting with the NZ Prime Minister, Huawei made the commitment to invest over NZ\$400million in the local economy over the next five years in recognition of the special relationship the company has had with New Zealand and the 'fairgo' it has had since it arrived in 2005.

For more information on possible roles within in Huawei or details on the company, please feel free to contact craig.butland@huawei.com



BUILDING FUTURES

THE TEAM I started my jour Grierson as an in year of my Bache

HG

Grierson as an intern in my second year of my Bachelor of Engineering degree. The projects I'm involved in range from providing engineering services for carparks, to the development of large commercial warehouses and comprehensive urban developments.

MEET ONE OF

The variety of work often takes me from one work environment to another. While I may be attending client meetings in the the morning, you'll likely find me on-site in gumboots, high-vis and a hard hat by the afternoon.

The best thing about working at Harrison Grierson though, is the family-like environment. The people at HG are really supportive with helping me further my career.

DON WU Graduate Engineer

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As one of New Zealand's leading engineering consultancies, Harrison Grierson is the perfect place to build your career. With offices throughout New Zealand and a range of exciting projects to sink your teeth into, you won't be short of variety.

GRADUATE & INTERN APPLICATIONS OPEN 12 MARCH - CLOSE 20 APRIL

WHY HARRISON GRIERSON

At Harrison Grierson, we pride ourselves in making a difference in the world, the projects we work on have a real impact on people's lives.

The size of our organisation is something our people love about working here. We're not too big or too small, which means you'll become an integral part of our team from day one.

Our graduate programme will help you develop your professional, personal and technical skills in order to reach your career goals. All backed by a supportive team of people, and a friendly and welcoming culture.

Are you ready to start your journey with us?



Meet the Student Development and Engagement team

The Student Development and Engagement team provides support to students to ensure they have the best possible experience at the University.

This includes pastoral support such as counselling, financial assistance and early childhood education, as well as mentoring and support plans for all students. Support is available from orientation through to employment.

Initiatives that are provided include Orientation, the Part I Assistance Centre, Women in Engineering Network (WEN), Tuākana for Māori and Pacific students, and information evenings with prospective employers.



Michael Willimott Student Development and Engagement Manager Phone: 09 923 7881 m.willimott@auckland.ac.nz Room 402.403, Level 4, 20 Symonds Street

Michael manages student development, engagement, support and retention initiatives to enhance students' experience.



Dr Naomi Fleming Women in Engineering Adviser Phone: 09 923 6773 n.fleming@auckland.ac.nz Room 402.414, Level 4, 20 Symonds Street

Naomi is focused on the participation, retention and success of female engineering students. She works closely with the Women in Engineering Network, and engages with schools to raise the profile of Engineering as a career choice for girls. The Student Development and Engagement team also provides the opportunity for the students to connect with the faculty and student organisations, through social events.

Other groups supported by the team are Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI), students with disabilities, refugee students and international students.



Chris McClymont Student Experience Adviser Phone: 09 923 2927 c.mcclymont@auckland.ac.nz Room 402.402, Level 4, 20 Symonds Street

Chris provides a range of development and engagement activities for all students. He works closely with Campus Life and the faculty's student clubs.



Jonathan Culley Employer Liaison Manager Email: j.culley@auckland.ac.nz Room 402.410, Level 4, 20 Symonds Street

Jonathan facilitates employer networking and fosters industry relationships, along with graduate and intern recruitment. He also provides advice and support to students on career options.



Alcione Fagundes Student Support Adviser (Equity) Phone: 09 923 2990 a.fagundes@auckland.ac.nz Room 402.412, Level 4, 20 Symonds Street

Alcione supports all engineering students with their wellbeing, pastoral care and learning support. She is also the primary Student Support Adviser for equity students.



Meleane Akauola Student Support Adviser m.akauola@auckland.ac.nz Room 402.412, Level 4, 20 Symonds Street

Meleane supports all engineering students with their wellbeing, pastoral care and learning support. She is also the primary Student Support Adviser for international students.



Steve Roberts Student Support Adviser (Māori and Pacific) Ext: 09 923 4538 s.roberts@auckland.ac.nz Room 402.412, Level 4, 20 Symonds Street

Steve supports all students with their wellbeing, pastoral care and learning support. He is the primary Student Support Adviser for Māori and Pacific students.



Monique Warder Student Experience Adviser m.warder@auckland.ac.nz Room 402.402, Level 4, 20 Symonds Street

Monique provides a range of development and engagement activities for postgraduate students.

Clubs and societies are an integral part of the Faculty of Engineering

With active clubs in our faculty, we are lucky to have a huge range of student activities, interests and support groups represented.

Clubs offer students the chance to develop professional skills and networks in their chosen fields of Engineering whilst others allow their members to occasionally blow off steam and relax in the middle of a demanding and time-consuming degree programme. Importantly, all our clubs are student led and student driven – this means that they provide activities for their members that their members really want (rather than activities and events Faculty staff think students want!) and offer students the chance to develop leadership capabilities. As club executive members, students are required to seek funding from internal and external sources, manage a (sometimes significant) budget, and come up with annual plans, all whilst pleasing a demanding membership body.

We are very proud of our Engineering Clubs and Societies, and the high level of service, support and entertainment they deliver to our students.

















RIGHT ON TRACK:

TRANSPORTATION CAREERS WITH TDG





I was interested in design while I was at school; urban planning, architectural and interior design really appealed to me. I chose art subjects, graphics, physics and calculus with an initial interest to study architecture.

I ended up studying engineering and found that the design components of the transportation papers in the Civil Engineering degree fascinated me; especially how people interact with the urban environment. As a keen cyclist and user of public transport, I feel like you get a real perspective when it comes to designing infrastructure. When you are regularly walking, riding and catching public transport you get a feel of how the design works with those who use the facilities.

I came to TDG because I had heard a lot about the business while I was working as a transport engineering intern elsewhere, as well as knowing them through their presence on campus at the Engineering Faculty (TDG was one of the Engineering Revue sponsors).

During my first year with TDG I've worked on a variety projects, including residential developments and public transport projects. As our team is relatively small, I have the opportunity to be involved with a range of TDG is a specialist transportation engineering design firm with nine offices throughout New Zealand & Australia. One of our recent graduate engineers, Elisa Hardijanto, tells us what her first year with TDG has been like.

Elisa joined TDG in February 2017 through our Graduate Recruitment programme, and studied at the University of Auckland. Here she tells us how she chose transport engineering and how she's found working at TDG for the past year.

different clients. I regularly travel to site to check out the physical location of the problem we are solving, meet with clients to understand what they need from us, and work with our TDG team members, both in Auckland and other offices, to come up with solutions to lots of different transport challenges.

I've really enjoyed being part of the TDG family. In my first month here we participated in Aotearoa Bike Challenge month, and had weekly bike rides in the Auckland Domain. We also participated as a national firm in the Steptember step challenge and I rode the Taupo Cycle Challenge with work as well. There's a good balance of social and work and we have annual weekends away – this year we're heading to Papamoa for some beach time!

Other people I studied with had come with a background interest in geography, computer modelling and planning. If you like problem solving, transport is a great industry to work in with real impact on people's day to day lives.

Want to know more about being part of the TDG family? Follow us on Facebook & Insta we regularly post photos of our teams doing fun stuff ⓒ

www.tdg.co.nz

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