Building Things That Matter

The IT industry continues to grow and evolve, with software development tools more agile and flexible than ever before. From cross-platform and blockchain development through to machine learning and artificial intelligence, advances in software expand the opportunities available to industry professionals. The growth and reach of software give tremendous power to software engineers who want to build applications and infrastructure to make a difference.

There are two basic types of software engineers, those who maintain existing systems and structures, and those who innovate and disrupt current paradigms through the creation of innovative new systems. As you might expect, the number of people in the first camp vastly outweighs the number of people in the second. Existing systems already exist, which means they're less risky, more dependable, and more likely to be funded.

The problem

Despite its vast potential, lack of innovation is an inherent problem with the software sector. Engineers and programmers are often underutilised, and companies risk becoming redundant due to a lack of novelty. Technology needs to adapt to the wider world, with software playing the critical interpretive role between data and the people who rely on it every day.

While standardised software tools and technologies exist for a reason, innovation and maintenance need to work hand-in-hand. If you're stuck in a dead-end role or employed by a company that doesn't understand the creative potential of code, you're likely to feel unmotivated and unsatisfied.

The Solution

While they may be fewer in number, true software innovators create an amazing amount of value in society. From open source knowledge projects through to weather prediction applications, travel services, and crowdfunding for charities, there are lots of ways to leverage the inherent power of software and build things that matter. If you're feeling bored and less than appreciated in your current role as a software engineer, perhaps it's time to spread your wings and look for exciting new opportunities.

If you're looking for inspiration, the following five projects are a great place to start:

Future reality

The nature of reality is changing before our very eyes. Virtual reality (VR) and augmented reality (AR) mix computer-generated and real-world environments to great effect, with these two related fields continuing to expand into new markets. While game development is the dream of many software engineers, these leading technologies go beyond the scope of Pokémon. Microsoft's HoloLens's is already being used by the US army for military training purposes, Walmart is investing in VR to train staff, and AR is being trialed by surgeons to perform life-saving operations.

The Internet of things

The Internet is no longer confined to your computer, with over 127 new devices going online every second. From vehicles and security systems through to toasters and fridges, there are increasing opportunities for software engineers to work with this exciting technology. Some positive applications in this field include automated vehicles and transportation, smart energy management, water distribution, and environmental monitoring.

The progressive web

Progressive web applications involve a combination of mobile and web technologies. With more people using the internet through mobile devices all the time, this technology is increasingly important. By using modern web technology to make a website look and feel like an app, you can create content that's accessible through URLs, indexed by search engines, and available offline. This technology can be a real benefit to people in rural areas or developing countries without a constant internet connection.

Blockchain

Blockchain technology has changed how the world thinks about information and data distribution. While this technology is mostly associated with the financial world of cryptocurrencies, a blockchain is nothing more than distributed ledger linked with cryptography, timestamps, and transaction data. As an incorruptible, inherently transparency, and censorship-free form of bookkeeping, this technology really does have the power to change the world. Blockchain technology is already being used to fund the refugee crisis, empower impoverished people, and eliminate voter fraud.

Weather prediction

Meteorologists use a wide array of software tools to help them predict weather patterns. Observational data from radar, radiosondes, weather satellites, and buoys are combined with advanced algorithms to makes sense of the data. The National Oceanic and Atmospheric Administration in the United States recently upgraded its core system for the first time in four decades after it was widely criticised during recent storm events. Each year, adverse weather events around the world cause deaths and create a massive amount of financial damage, with software engineers able to make a real positive contribution.

While software applications and systems are getting better all the time, many highly skilled and experienced engineers feel trapped performing system maintenance and other tasks to keep the machine running. While software engineering is an inherently creative task, and even the most boring financial systems are capable of adding value to human lives, it's perfectly OK to desire something more. If you want to build things that matter and change lives for the better, perhaps it's time to think outside the box so you can meet your true potential.

If you would like to discuss insourcing vs outsourcing with us, please contact us:

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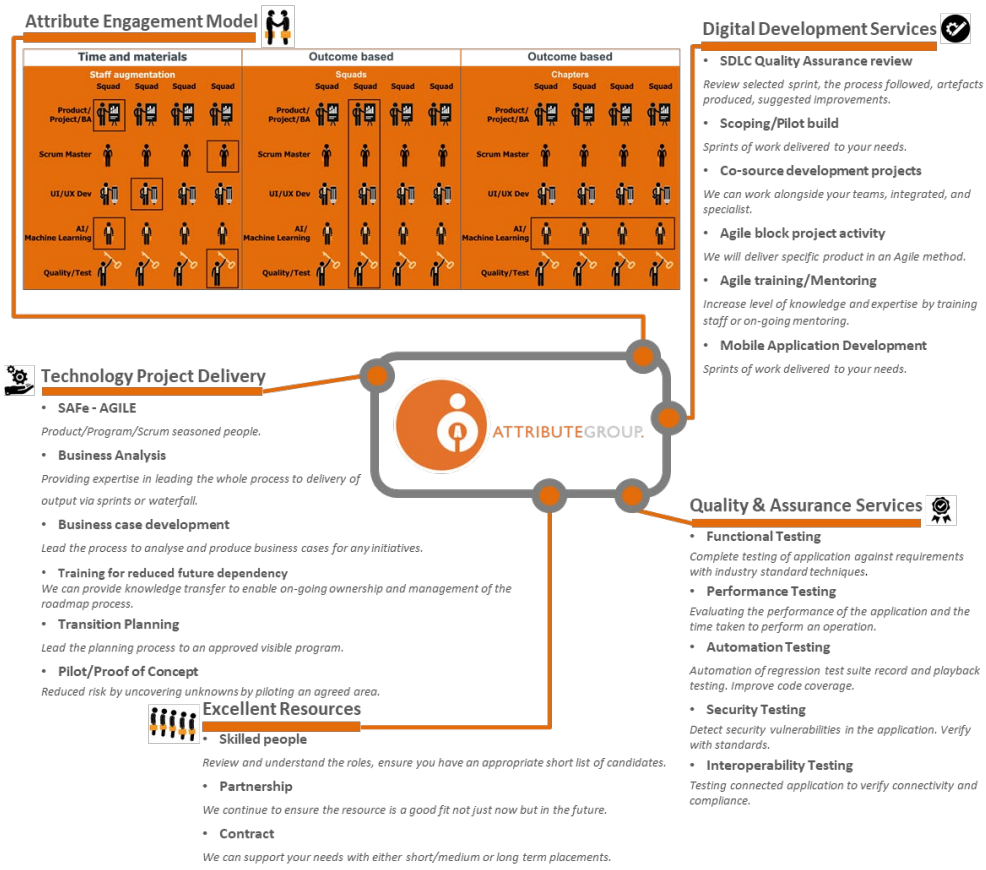
Or email enquiries@attributegroup.com.au

OVERVIEW

Attribute Group are an award-winning staffing solutions company which started in Sydney in 2008, and now has offices in Melbourne (opened in 2009) Auckland (opened in 2018) and Brisbane (opened in 2019). With a focus on IT and Digital, Attribute have over 400 contractors and 25 Technical full-time consultants working onsite at our various partner clients.

AREAS OF SERVICE



RECRUITMENT SPECIALISATIONS

Project Services – (Agile Professionals, PM, BA, Coordinators, Delivery Managers)
Development – (Front End, Back End and Full Stack), Mobile, AEM
Quality Assurance/Test – (Automation, Manual, Performance)
Infrastructure, DevOps & Cloud – (DevOps/Cloud/System Engineer, Architect, Database Administration, IT Support)
Security – (Penetration Testing, PCI DSS, Information Security, Identity Management, Cyber, SOC, Compliance & Governance)
Digital & E-commerce – Digital Marketing, Design (UX, UI, Product), Product (Managers, Owners)
Big Data/Analytics & BI/DW – (Data Science, Data Engineering, Data Analyst)