Selection Documentation

2022 Technologist Campaign

Data Engineer

Levels 4-6

Level 4: $85,383 - $89,066 plus superannuation

Level 5: $92,297 - $99,439 plus superannuation

Level 6: $102,168 - $117,746 plus superannuation

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ASIS is Australia's overseas secret intelligence collection agency. Its mission is to protect and promote Australia's vital interests through the provision of intelligence services as directed by the Australian Government. Its work can involve collecting intelligence relating to national security, international relations and economic issues. It also contributes to Australia's coordinated national efforts against terrorism, proliferation of weapons of mass destruction, and trans-national issues such as people smuggling.

ASIS employs people in a wide range of roles, including technologists in the fields of engineering (infrastructure, electronic, systems), data science and data engineering, cyber specialists, solution architecture, database administrators, IT support, network specialist, software development, project management / project support, procurement and business analysis. These roles require dynamic team players who enjoy working with stakeholders, team members and individually on projects.ASIS is looking for technologists who will be able to meet tight deadlines and work to support ASIS priorities. Successful candidates will have excellent coordination and administration skills, excellent verbal and written communication skills; and, strong stakeholder engagement and influencing skills. Relevant tertiary qualifications will be highly regarded.

ASIS values workplace diversity and is committed to providing a supportive, inclusive and respectful work environment. We encourage applications from Aboriginal and Torres Strait Islander People, women, people with disabilities, people that identify as LGBTIQ+ and people from culturally and linguistically diverse backgrounds.

All positions are based in Canberra.

Role: Data Engineer (L4-L6)

ASIS is looking for Data Engineers who have a passion to deliver capability, and provide real benefit to secret intelligence operations. Data Engineers use their technical expertise to develop systems that make data collected through HUMINT operations accessible to intelligence analysts and data scientists. They work across the technology stack and opportunities range from engineering bespoke high-performance computer platforms, to developing applications that utilise advanced computer science, and machine learning algorithms.

The systems ASIS Data Engineers develop span the data lifecycle of collection, transfer, enrichment, modelling, storage and presentation. They must be accredited to protect highly sensitive and classified information by implementing robust security practices through use of encryption, authentication and authorisation services. The data is diverse ranging from formats that are high volume and structured, to those which are low volume and unstructured – any piece of which may provide that key piece of intelligence to decision makers.

These are true data challenges which require the use of cutting-edge technologies, close engagement with customers, and a desire to improve business processes. This is a unique work environment, and problem space that cannot be found outside of ASIS.

Key Responsibilities and Tasks

Level 4: Undertake tasks of moderate complexity and work under general direction
- Understand the business context of data capabilities.
- Assist in developing, testing, and deploying data pipelines, data stores and user interfaces.
- Carry out basic system administration, data quality checks and fault remediation.
- Work with subject matter experts in an agile project environment.
- Learn data engineering standards, tools and best practices

Level 5: Undertake tasks of moderate complexity and work under limited direction
- Translates user requirements into a technical solution for data processing.
- Develop, test, and deploy data pipelines, data stores and user interfaces.
- Carry out routine system administration, data quality checks and fault remediation.
- Work in an agile project environment.
- Apply data engineering standards, tools and best practices

Level 6: Undertake complex tasks under limited direction
- Gather, refine and translate user requirements into technical solution for data processing
- Design, develop, test and deploy complex data engineering solutions to acquire, process and present data.
- Carry out complex data quality checking and remediation.
- Lead developments in an agile project environment.
- Apply, and keep up to date with data engineering standards, tools and best practices

Core Skills and experience requirements
- Software development experience using a modern programming language (e.g. Java, Spark / Scala).
- Experience with database technologies, including their design, population, and querying.
- Familiarity with version control systems and continuous integration systems.
- Ability to optimise processes through the use of different algorithms, data structures, and system architectures.

Experience in the following is desirable:

- Big data, NoSQL, or non-relational database technologies (e.g. Apache Accumulo, Apache Solr).
- Data pipeline technologies that extract, transform and load data (e.g. Apache NiFi).
- Developing user interfaces with modern web frameworks (e.g. Vue.js, React) for data intensive applications.
- Administering server infrastructure, and high-power computing stacks.
- Administering network infrastructure.
- Implementing robust user Authentication, Authorisation, and Accounting.

Applicant Instructions:

To APPLY, please submit an application ONLINE via the website.

Candidates are required to provide a comprehensive resume detailing their work history and provide responses to the following questions:

1. Please indicate the level you are applying for. Level 4 / Level 5 / Level 6
2. You will be required to submit a maximum 800 word pitch outlining your skills and experience for the role.

APPLICATIONS CLOSE: Please refer to the website for closing date.

What Happens Next?

Please do not tell anyone about your application with our organisation at this stage of the process as doing so may harm your suitability for employment with us.

You may be contacted via SMS regarding the next stage of the process.

A merit list will be established for candidates who are suitable and will remain valid for a period of 12 months.

We thank you for the time and effort you have put into your application; however, we are unfortunately unable to provide feedback to unsuccessful candidates.