

Selection Documentation

2022 Technologist Campaign

Data Engineer

Executive Levels 1-2

Executive Level 1: \$127,562 - \$149,038 plus superannuation

Executive Level 2: \$150,731 - \$177,861 plus superannuation

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 (EL1-2)

ASIS is looking for experienced 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 compute 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 can not be found outside of ASIS.

Key Responsibilities and Tasks

Executive Level 1: Undertake complex tasks and work under broad direction

- Take responsibility, manage and contribute to the delivery of technical data processing solutions in an agile environment.
- Identify, establish and implement system improvement initiatives.
- Provide strategic technical advice within the ASIS data ecosystem.
- Develop strategic data relationships in the intelligence community.
- Provide quality assurance practices and risk assessments for data processing solutions.
- Maintain professional knowledge and continue to develop deep subject matter expertise in relevant data technologies.

Executive Level 2: Undertake highly complex tasks and work under broad direction

- Coordinate, lead and contribute to the delivery of technical data processing solutions in an agile environment.
- Develop data engineering standards and strategies.
- Anticipate and establish priorities for ASIS data capabilities and provide strategic technical advice.
- Develop and manage strategic data relationships in the intelligence community.
- Oversea quality assurance practices and risk assessments data processing solutions.
- Maintain professional knowledge and continue to develop deep subject matter expertise in relevant data technologies.

Core skills and experience requirements

- Software development experience using a modern programming language (e.g. Java, Spark / Scala).
- Experience with relational, and non-relational database technologies (e.g. Oracle, Postgres, Apache Accumulo, Apache Solr).
- Experience with data pipeline technologies that extract, transform and load data (e.g. Apache NiFi).
- Experience with version control systems and continuous integration systems.
- Optimising processes through the use of different algorithms, data structures, and system architectures.
- Excellent written and oral communication skills.
- Capability for strategic thinking and analysis, especially in an intelligence agency context.

The following skills and experience would be desirable:

- 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: Executive Level 1 / Executive Level 2
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.