Position Description – Senior GIS Analyst

Position Details	
Company	Ecocene
Employer	Astron Environmental Services Pty Ltd trading as Ecocene Expertise
Title	Senior GIS Analyst
Discipline	Geographic Information Systems (GIS)
Award	Professional Employees Award
Award Classification	Level 3
Team	Earth Observation
Location	Perth and various Australian locations as required by Ecocene
Reports to	Manager – Earth Observation

Position Objective

The purpose of this position is to provide GIS advice, analysis and support to all teams within Ecocene. This covers the preparation of mapping products, field data capture, and the creation, management and analysis of spatial data. The position also designs the spatial models and automated workflows that make the Earth Observation team's spatial products repeatable and reproducible.

About Ecocene

Ecocene is a forward-thinking ecological services and technology Company that delivers measurable biodiversity and ecosystem restoration outcomes. Combining scientific expertise with innovative technology, we provide data-driven solutions for organisations across mining, energy, government, infrastructure, finance and conservation sectors.

About the Team

The Earth Observation team comprises GIS specialists, project coordinators, remote sensing specialists and data scientists. The team delivers reports, analyses, spatial data and derived products using data obtained in the field through advanced monitoring methodology, as well as using remotely sensed data, including multi- and hyperspectral digital imagery, LiDAR and SAR data captured through satellite, UAV, airborne platforms or ground-based sensors. Our complex scientific workflows are automated using best-of-breed technology frameworks for efficiency gains, scientific rigour and repeatability.

Responsibilities	
Delivery	Deliver GIS tasks and projects while supporting project scoping, quality assurance and final delivery. Deliver work to a high standard, within agreed timeframes and in line with company guidelines and management instructions. Oversee all assigned projects with minimal supervision, delivering each within time and budget.
Leadership	Provide technical leadership to GIS Analysts, review their work for quality, and help coordinate work and resources. Mentor GIS staff in scripting, automation and spatial modelling.
Project Advice and Review	Provide technical advice and review for projects and deliverables. Provide troubleshooting and day-to-day GIS support to project teams. Assist in the development of proposals for new projects. Scope spatial modelling and automation work in proposals, including methods, data needs, effort and limitations.
Spatial Modelling and Analysis	Design, run and document spatial models for ecological and environmental questions. Integrate remote sensing products, field survey data and client data in spatial analyses. Work with the data scientists and remote sensing specialists on model inputs and outputs.

Automation and Reproducibility	Build, test and maintain automated geoprocessing workflows in Python (ArcPy and open-source libraries) and ModelBuilder. Convert manual, recurring GIS tasks into documented and repeatable workflows. Keep scripts and models under version control (Git or similar), with documentation that lets another analyst rerun them. Record the provenance of every derived spatial product: source data, processing steps, software and product version.
Data Management and Reporting	Manage spatial data through data entry, analysis, management and map production tasks. Design and maintain project geodatabases and data models. Transform spatial data between coordinate reference systems. Produce maps and figures to a high cartographic standard. Undertake GIS preparation and data and equipment management for field trips. This includes field map preparation, configuring field data capture apps, and managing the field data returned. Undertake QA/QC of spatial data.
Systems Maintenance / Development	Maintain and develop data collection platforms, spatial databases and the team's GIS software environment.
Process / Product Improvement	Assist with the improvement and development of Ecocene's processes, procedures and products, including the team's spatial data standards. Support the adoption of improved GIS tools, standards and workflows across the team. Submit spatial data to clients in line with each client's spatial data requirements and standards. Provide technical advice and direction for projects and proposals.
Communication	Communicate and present mapping products and model outputs for environmental and ecological purposes. This includes presenting to and communicating with external clients, as well as internal teams.
Team and Client liaison and Participation	Effectively liaise with all employees and clients of Ecocene. Participate in meetings, training, workshops and inductions where required. Provide training and mentoring to employees, particularly in the application and analysis of mapping products and spatial models.
Health and Safety	Participate in the development and maintenance of a safe and healthy workplace. Oversee completion of HSE Plan and other safety documentation. Comply with instructions given for your own safety and health and that of others and adhere to safe work procedures. Be proactive in identifying and reporting health and safety risks, accidents, incidents, injuries, property damage and mishaps in the workplace. Co-operate with management in its fulfilment of its legislative obligations.
Other	Maintain a sound knowledge of current Company (and Client if applicable) Policies, Procedures, Standards and Guidelines, and reliably follow these. Cultivate relationships through effective constructive communication and positive consultation. Act professionally and treat everyone with respect. Speak up if you see, hear or experience disrespectful behaviour directed towards you or anyone else. Positively influence and shape Company culture by ensuring a safe, productive, quality, sustainable and disciplined approach to work. Maintain confidentiality in relation to work of a confidential or sensitive nature. Undertake other duties as required.

Other Requirements	
Qualifications	A Bachelor's Degree or Higher in Environmental Science, GIS, Remote Sensing, Geospatial Science or another closely related scientific discipline.
Experience	5+ years of professional experience in GIS, Remote Sensing or similar fields, including designing and applying spatial models to ecological questions. Extensive experience applying GIS in biological or environmental sciences using the Esri ArcGIS suite. Experience building automated, reproducible geoprocessing workflows in Python or ModelBuilder. Experience supporting projects from proposal to delivery.
Skills (Essential)	Esri ArcGIS suite, Python scripting for geoprocessing (ArcPy and libraries such as GeoPandas, GDAL or rasterio), and Git or other version control. In-depth understanding of coordinate reference systems and transformation between them. Cartographic mapping, spatial data editing and geodatabase design. Ability to interpret, apply and help develop data standards, and to document methods so others can reproduce them. Excellent communication, organisational and problem-solving skills.
Skills (Desirable)	PostGIS, QGIS or other open-source geospatial tools. Processing large raster datasets, including cloud-based processing. Spatial statistics or R. Remote sensing image analysis. Consultancy experience.
Teamwork	Ability to work in and foster a team environment.
Health and Safety	Strong focus on health and safety.

Our Framework for Success	
Our Framework for Success outlines the mission, purpose, values and promises that drive our behaviour and decisions at Ecocene. These shared principles not only guide our ecological work, but foster the collaborative, innovative and respectful culture that makes Ecocene a rewarding place to build your career.	
Our Mission	
We empower people with expertise and intelligent solutions to protect and restore nature.	
Earth Observation Team Mission Statement	
To empower decision-makers with actionable ecological insights derived from spatial data that enhance environmental monitoring and management.	
Our Purpose	
Protect through knowledge	Catalysing ecosystem protection and restoration through knowledge and technology
Advance through evidence	Advancing ecological solutions to reverse biodiversity decline through evidence-based management
Enable through resources	Mobilising tools and financial resources to help organisations and communities achieve measurable biodiversity gains
Our Values	
We pursue excellence	We're passionate people committed to delivering outstanding results
We tackle the challenge together	We pitch in, support and encourage each other to deliver as a team
We adapt on demand	We're responsive to change, and ready to pivot to put it at our advantage
We stay grounded	We keep it real, communicating openly, honestly and with trust
We operate with respect	We act with integrity, take accountability and treat people with respect

Our Promise to Clients	
Customer Service	Responsive, personalised support that delivers solutions exceeding expectations
Safety	Unwavering commitment to the wellbeing of our people, customers and the environment
Quality	Rigorous standards ensuring reliable, evidence-based outcomes our customers can trust
Security & Privacy	Robust protection of data through transparent security practices and reliable systems

Employee Approval			
Employee Name:		Signature and Date:	