

Position Description

Position title:	Team Leader - Computer Vision, Spatial and Perception AI
Reports to:	Digital R&D Manager
Business unit:	Corporate Affairs, Customer and Strategy Group
Employment category:	Contract (Employment Agreement)

About CitiPower and Powercor

As electricity distribution companies we provide safe, reliable and affordable power to 1.9 million Victorian customers. We use our network of poles, wires and infrastructure to bring power to homes and businesses across almost 65% of Victoria — that's more than 120,000 kilometres of wires and 850,000 poles.

But we do so much more than manage poles and wires. We're also the gateway to a clean energy future, dedicated to finding solutions and harnessing new technology to benefit our customers, communities and the environment. This includes industry leading projects in community batteries, demand management, smart charging for electric vehicles (EVs) and microgrids.

And as more customers choose solar, batteries, EVs and smart appliances — the electricity system is becoming increasingly complex, and so too is the level of innovation required to manage it.

About the Corporate Affairs, Strategy and Customer Group team you'll be part of

The Corporate Affairs, Customer and Strategy Group team collaboratively support the key programs of work underpinning our organisational vision and priorities. The team specialise in delivering strategic initiatives and operational improvements that enhance our customer experience, drive stakeholder engagement and uphold the reputation of our three distribution networks through a diverse range of functions including customer connections and service, internal and external communications, stakeholder management, media relations, marketing, brand, digital innovation, change management.

Our core values



Live safely



Improve our business



Be customer and community minded



Be the best you can be



Succeed together

Purpose of the position

This role leads the research, development, deployment, and continuous enhancement of advanced Computer Vision, Perception AI, and Spatial Intelligence capabilities to improve operational efficiency, asset intelligence, safety, and automation across the electrical distribution network. Working with high-dimensional multi-modal data—including imagery, video, spatial datasets, and selected LiDAR/3D applications—the role delivers core perception technologies that enable a variety of digital and hardware initiatives. It is also responsible for establishing robust MLOps practices to ensure scalable model development, reliable deployment, ongoing monitoring, and continuous improvement. The role works collaboratively with other specialised teams across the organisation to ensure alignment, clear boundaries, and efficient integration of related capabilities.

Your key responsibilities

Computer Vision & Perception AI Development

- Lead the design and development of advanced computer vision and perception AI models for detection, segmentation, anomaly identification, change detection, and scene understanding.
- Build scalable perception algorithms using imagery, video, 3D spatial data, and multi-sensor inputs to support operational decision-making.
- Conduct targeted R&D on LiDAR, point-cloud analytics, spatial and other computer vision modalities where required for perception or robotics applications as needed.
- Develop reusable perception frameworks, pipelines and systematic processes that can be applied across multiple business units and use cases.
- Evaluate and integrate modern techniques such as vision-language models, synthetic data generation, and multi-modal AI to enhance perception capabilities.

Collaboration & Integration with Generative AI and Other Teams

- Collaborate with the Generative AI (agentic applications) team on multi-modal solutions where perception outputs integrate with LLMs, agents, or decision systems.
- Use generative AI techniques—such as synthetic data, diffusion models, or multi-modal fusion—to strengthen perception model performance.
- Work collaboratively across business units—Digital Innovation, Asset Management, Vegetation, Field Operations, IT—to identify high-impact perception-driven opportunities.
- Communicate technical concepts, limitations, and operational impacts of perception systems effectively to both technical and non-technical stakeholders.

MLOps, Engineering Excellence & AI Governance

- Own the full lifecycle of vision and perception models, including training, validation, deployment, monitoring, and continuous improvement.
- Implement scalable MLOps pipelines for data ingestion, model versioning, CI/CD for ML, retraining, and operational monitoring.
- Ensure solutions meet governance, safety, reliability, cybersecurity, and compliance standards appropriate for critical infrastructure.
- Collaborate with cloud, data engineering, and platform teams to deploy perception models efficiently and maintain technical robustness.

- Establish and uphold best practices for experiment design, model evaluation, documentation, reproducibility, and responsible AI deployment.

Team Leadership, Strategy & Capability Development

- Lead, coach, and develop a specialised team of computer vision, perception AI, and spatial AI engineers to deliver high-quality outcomes.
- Create and maintain the **Perception & Spatial AI Capability Roadmap**, ensuring alignment with organisational priorities and complementary teams (GenAI and Vegetation LiDAR Analytics).
- Drive a culture of innovation, experimentation, accountability, and continuous learning within the team.
- Plan and manage team resources, project allocations, skill development, and workload to meet strategic and operational needs.
- Build capability in modern vision, spatial, and multi-modal AI technologies, ensuring the team remains future-ready and aligned with emerging industry trends.

What you'll bring to the business

Education / Qualifications:

- Bachelor's degree in **computer science, ML/AI, engineering, robotics, or a related field**.
- Postgraduate degree preferred.

Knowledge:

- Deep expertise in computer vision and perception AI.
- Experience with multimodal and generative AI techniques supporting perception (e.g., synthetic data).
- Proficiency in Python, PyTorch/TensorFlow, and GPU-accelerated computing.
- Knowledge of imagery, video, spatial modelling, and selective LiDAR use cases.
- Strong understanding of robotics perception (SLAM, mapping, multi-sensor fusion)
- Understanding of hardware-software integration workflows for sensor platforms.

Experience:

- 7+ years in AI/ML roles with strong computer vision or perception experience.
- Demonstrated success deploying perception systems to production.
- Prior leadership of AI/ML teams is strongly preferred.
- Experience in utilities, energy, infrastructure, robotics, or other asset-intensive industries is advantageous.
- Experience collaborating with cross-functional teams, robotics teams and/or hardware developers to enable perception capabilities.

The skills and competencies you'll have

'Thought' competencies

1. Tech savvy: Anticipating and adopting innovations in business-building digital and technology solutions
2. Cultivates innovation: Creating new and better ways for the organisation to be successful
3. Manages complexity: Making sense of complex, high quantity, and sometimes contradictory information to effectively solve problems

'Result' competencies

1. Plans and aligns: Planning and prioritising work to meet commitments aligned with organisational goals
2. Action oriented: Taking on new opportunities and tough challenges with a sense of urgency, high energy, and enthusiasm
3. Being resilient: Rebounding from setbacks and adversity when facing difficult situations

'People' competencies

1. Communicates effectively: Developing and delivering multi-mode communications that convey a clear understanding of the unique needs of different audiences
2. Collaborates: Building partnerships and working collaboratively with others to meet shared objectives
3. Persuades: Using compelling arguments to gain the support and commitment of others

'Self' competencies

1. Instils trust: Gaining the confidence and trust of others through honesty, integrity, and authenticity
2. Situational adaptability: Adapting approach and demeanour in real time to match the shifting demands of different situations
3. Nimble learning: Actively learning through experimentation when tackling new problems, using both successes and failures as learning fodder

'Leadership' competencies

1. Manage self: Willing and able to assess and apply own skills, abilities and experience. Being aware of own behaviour and how it impacts on others.
2. Take the lead: Taking the lead and pushing for performance. Take charge, declaring, decisive. Push, hold people accountable.
3. Enable others: Creates conditions for others to lead and contribute. Empowers others. Listens, open to influence. Supports, treats people well.
4. Strategic focus: Position your team for the future. Set direction, drive improvements and growth, embrace innovation.
5. Execution and results: Position your team for the future. Set direction, drive improvements and growth.

Other relevant information

- Travel to other work locations / sites may be required
- Direct reports - FTE direct reports: 1 Contractor, 3 direct reports