



Safeguarding Energy Infrastructure with **Bird Nest Detection Solution**

Our advanced Bird Nest Detection solution protects critical energy infrastructure by accurately **identifying nests near transmission lines, towers, and substations, minimizing damage and supporting uninterrupted enterprise operations.** Using **machine learning, real-time analytics,** and technologies like **Azure Container Registry, Azure Kubernetes Service, Azure Cosmos DB, and Azure Blob Storage,** it delivers **predictive monitoring, early alerts, and actionable insights** to reduce risks, ensure compliance, and optimize performance. It integrates **Azure Custom Vision** for rapid model training, **Segment Anything Model (SAM)** for pixel-accurate segmentation, and **OpenAI CLIP (Contrastive Language-Image Pre-training)** for contextual visual understanding, with few-shot learning for fast adaptation.

Gartner projects global IT spending in the power and utilities sector to reach \$249.1 billion in 2025, a 10% increase from \$231.2 billion in 2024. This growth is expected to continue with a 10.3% CAGR, reaching \$385.6 billion by 2029.

Key Features



Proactive Nest Identification



Precision Monitoring



Advanced Data Analytics



User-Friendly Interface



Instant Alerts & Notifications

Core Benefits



Damage Prevention



Operational Efficiency



Cost Savings



Compliance & Regulatory Adherence



Enhanced Decision-Making

Impacts

3X



Minimized Downtime

60%



Reduction in Maintenance Cost

2X



Enhanced Operational Safety

50%



Reduced Damages & Outages