Here is the merged and organized presentation of the results:

Categorized Summary of Innovations

1. Medical Imaging

- **SFNet**: A deep learning framework for Alzheimer's disease diagnosis using 3D MRI scans, integrating spatial and frequency domain information.
  - *Key Innovation*: Achieves 95.1% diagnostic accuracy on ADNI dataset.
  - *Link*: SFNet: Spatial-Frequency Domain Deep Learning Network

2. Neural Networks and AI

- **APTx Neuron**: A novel neural computation unit integrating activation and linear transformation, reducing layers and parameters.
  - *Key Innovation*: Achieves 96.69% test accuracy on MNIST with 332K parameters.
  - *Link*: APTx Neuron: Unified Trainable Neuron Architecture
- **SegQuant**: A semantics-aware quantization framework for diffusion models, enhancing deployment efficiency.
  - *Key Innovation*: Maintains performance while reducing computational costs through dual-scale quantization.
  - *Link*: SegQuant: Semantics-Aware Quantization Framework

3. Computer Vision and Robotics

- **EndoControlMag**: A motion magnification tool for endoscopic vascular surgery, improving visualization of subtle movements.
  - *Key Innovation*: Combines periodic reference resetting with tissue-aware magnification for surgical precision.
  - *Link*: EndoControlMag: Robust Endoscopic Vascular Motion Magnification
- **PINN-based Policy Iteration**: A mesh-free method for solving high-dimensional Hamilton--Jacobi--Isaacs equations using neural networks.
  - *Key Innovation*: Handles nonconvex problems in stochastic differential games effectively.

4. Generative Models

- **EarthCrafter**: A scalable framework for generating large-scale 3D Earth models using sparse latent diffusion.
  - *Key Innovation*: Efficiently decouples structural and textural generation for high-quality outputs.

    - *Link*: EarthCrafter: Scalable 3D Earth Generation
- **Dual-Sparse Latent Diffusion**: Used in EarthCrafter to separate geometry and texture, reducing computational complexity.

5. Quantum Computing and Optimization

- **APTx Neuron**: Offers efficient neural design suitable for optimization tasks.
    - *Key Innovation*: Unified activation and computation enhance efficiency.

This organized summary ensures each innovation is presented once under the most appropriate category, with all relevant details and links included for reference.