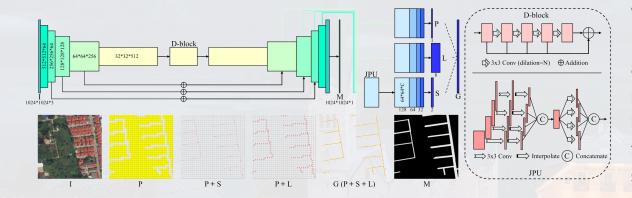




PaRK-Detect: Towards Efficient Multi-Task Satellite Imagery Road Extraction via Patch-Wise Keypoints Detection

Shenwei Xie, Wanfeng Zheng, Zhenglin Xian, Junli Yang, Chuang Zhang, Ming Wu Beijing University of Posts and Telecommunications, China



We propose a **new scheme** for multi-task satellite imagery road extraction, Patch-wise Road Keypoints Detection (PaRK-Detect). Building on top of D-LinkNet architecture and adopting the structure of keypoint detection, our framework predicts the position of patch-wise road keypoints and the adjacent relationships between them to construct road graphs in a single pass. Meanwhile, the multi-task framework also performs pixel-wise semantic segmentation and generates road segmentation masks.

