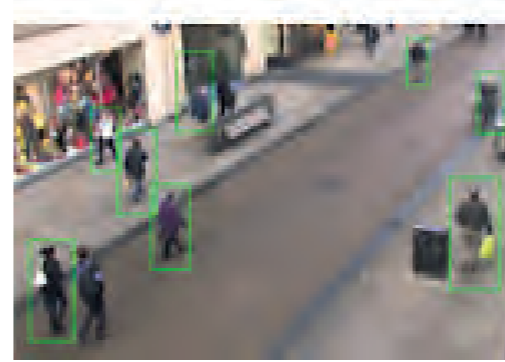
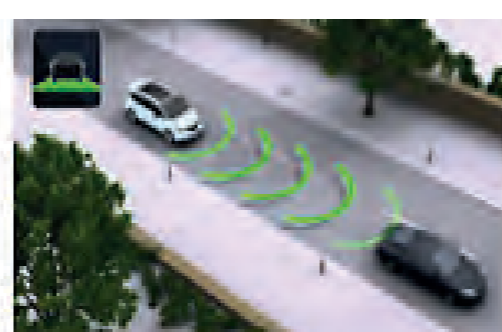


DeepManta

A many-task deep neural network for **visual object recognition**

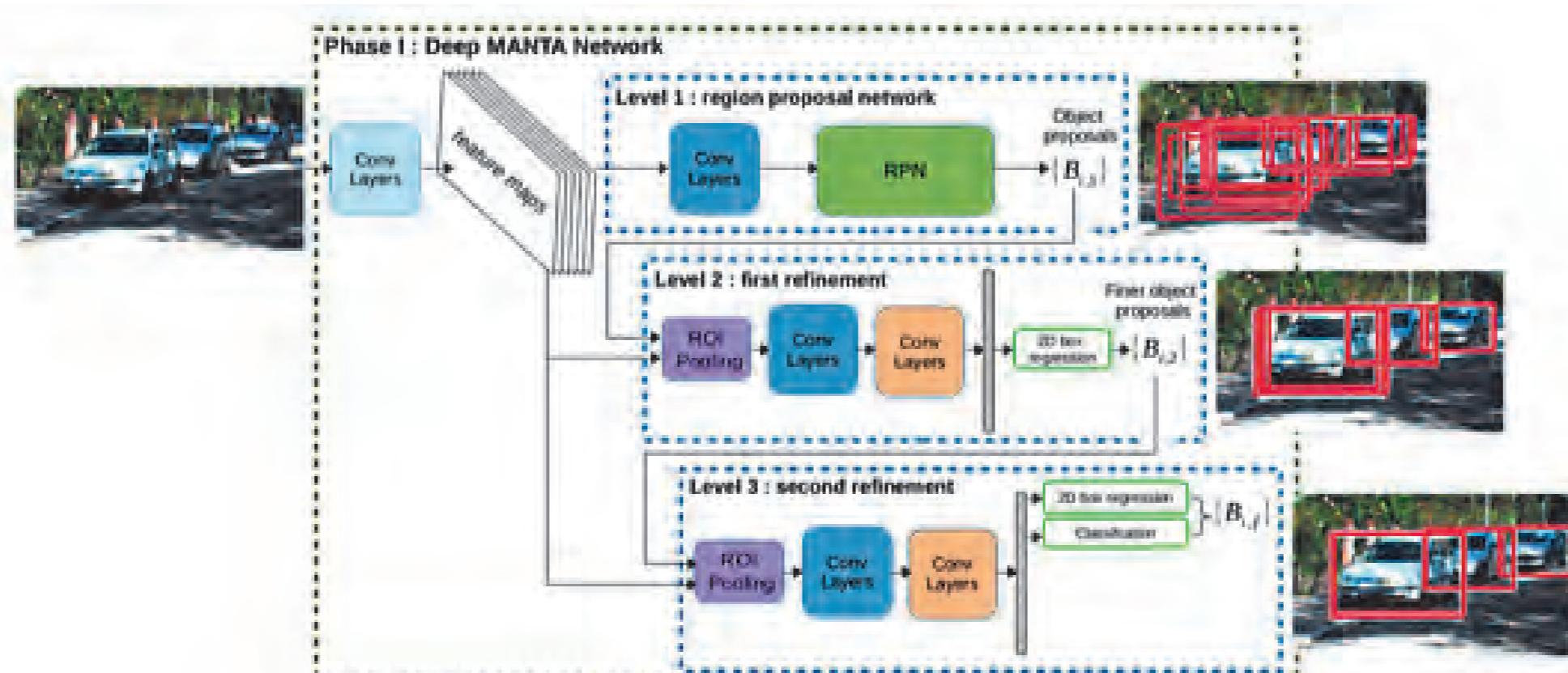
Context

- Driving assistance
- Autonomous driving
- Smart City
- Video-protection
- Manufacturing



Technology

Many-task Deep Neural Network for automatic detection and 3D analysis of vehicles from a single image



- | | | | |
|---|---------------------------|---|----------------------------------|
| 1 | Vehicle detection | 4 | 2D /3D localisation |
| 2 | Vehicle model recognition | 5 | Part localisation |
| 3 | Accurate pose estimation | 6 | Part visibility characterization |

Performance

KITTI international benchmark for traffic scene analysis

Competitors: Baidu, UCSD, NVIDIA, Stanford University, NEC Laboratories, University of Toronto...



DeepManta
1st rank in vehicle orientation estimation
Top-10 in object detection
Runs at 10 Hz on Nvidia Gtx 1080

Perspectives

- Reduce computational complexity
- Extend to multi-class object detection
- Extend to other applications
- Technological transfer

Contact

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