



Druma One technology overview

Is a state-of-the-art point detection model designed to address challenging issues in Computer Vision. Its **patented technology** enables real-time processing, making it ideal for applications that require high accuracy, speed, and compute efficiency.

[Please click [here](#) to view a demo output video.]

Performance comparison with SuperPoint

The below benchmarks were calculated on a video with dimensions 640 x 480 x 3.

| GPU | Superpoint - FPS | SuperPoint - Avg Points Detected per image | Druma One - FPS | Druma One - Avg Points Detected per image |
|-----------------|------------------|--|-----------------|---|
| RTX 1060 Mobile | 32.09 | 601.79 | 694.5 | 6839.65 |
| 2070 | 45.36 | 601.79 | 1009.95 | 6836.74 |
| RTX 3050 Mobile | 35.7 | 599.99 | 1079.04 | 6836.74 |
| 4070 Super | 79.15 | 601.61 | 1145 | 6836.74 |

Druma One's performance can be enhanced using an **in-house developed IC [Integrated Circuit]**. This IC can be seamlessly integrated with existing image processing ICs or paired with microprocessors/microcontrollers, further reducing FPS and enhancing efficiency.

Applications-

1. **Autonomous Vehicles** - Implementing obstacle detection, lane keeping, and navigation systems for autonomous driving.
2. **Augmented Reality [AR]** - Enabling real-time point detection for immersive AR experiences.
3. **Robotics and Drones** - Assisting in object detection, collision avoidance, and path planning for autonomous robots and drones.
4. **Simultaneous Localization And Mapping [SLAM]** - Enhancing robot navigation and 3D mapping in dynamic environments.
5. **Medical Imaging** - Improving diagnostic processes through the identification of critical anatomical points or lesions, aiding in more precise medical decisions.