

IOWN INTEGRAL

NTT R&D FORUM 2024

BUSINESS

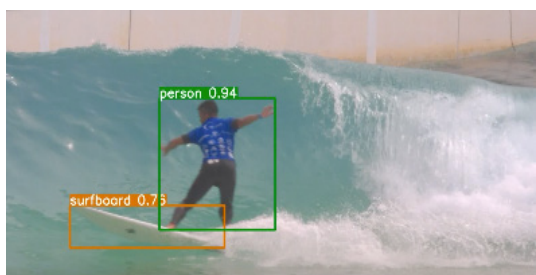
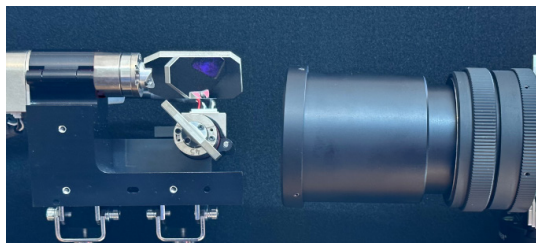
β 01-01

High speed mirror-driven tracking camera

A two-axis rotating mirror is placed in front of the camera to achieve agile pan/tilt

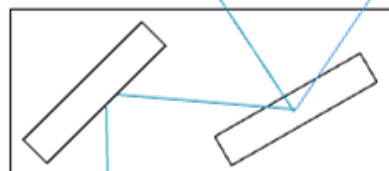
#Regional Revitalization

ミラー
mirrors



ミラー
Mirrors

(被写体)
(object)



カメラ
Camera

- ✓ 上下・左右に回転軸の異なるミラーをカメラ前面に配置し俊敏なパン/チルトを実現
- ✓ A camera with mirrors of different vertical and horizontal axes in front enables quick pan and tilt movements.

フォーマット
Format

Full HD (1920x1080@30)

焦点距離
Focal length

270-1000mm (35mm equivalent)

サンプル映像はこちら→

The sample video is available here→



///Technical Issue

- Cutting a subject from a wide-angle image lowers resolution.
- PTZ cameras' slow pan/tilt speeds make tracking fast-moving subjects difficult.

///Research Goal

Lowering costs by enabling zoom photography of high-speed subjects and making advanced techniques accessible to all.

---Technology

- A structure that places two mirrors with different rotational axes in front of the lens.
- A mechanism that enables a single camera to handle sensing, capturing, and video output of the target vehicle.

---Novelty

- Unlike wide-angle cropping, this solution uses optical zoom to track subjects without losing resolution.
- Unlike PTZ cameras, the high-speed mirror rotation in this solution enables faster pan and tilt, allowing effective tracking of high-speed objects.

---Applicable Business

- “Applied to the automatic recording of footage in facilities within the sports and entertainment sectors (around Q4 2024).”