R&D phase | Research **Expected Commercialization** | FY28-

Mehr Licht!
More Photonics for Intelligence

#C03

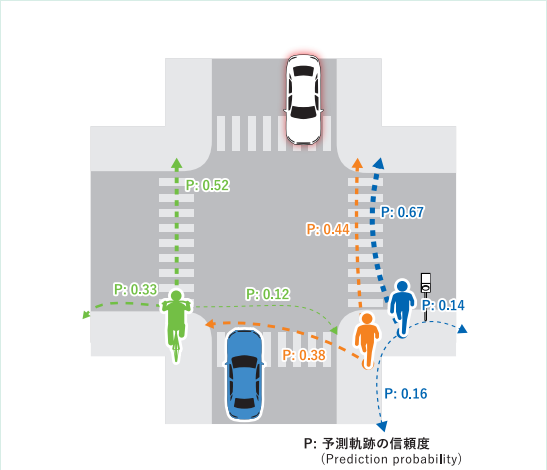
#Safety and Security#Elderly Support

Intersection VRU Trajectory Prediction

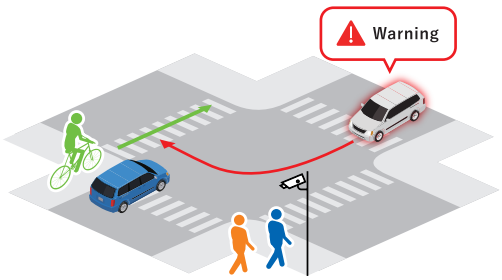
Predicting pedestrian and cyclist movements for intersection safety

Technical Challenges & Goals

Achieving zero traffic accidents requires protecting pedestrians and cyclists hidden from drivers. Conventional systems mainly detect and track positions, limiting early risk detection. Our technology predicts future movement from intersection cameras, detects hazards sooner, and helps prevent accidents.



危険行動を含む複数の将来軌跡と信頼度を
リアルタイムに予測
Predict multiple safety-critical trajectories with confidence scores in real time



危険行動を予測して車両にアラート
Predict potential hazards and alert the vehicle

Key Technologies

Core Technologies

- Predicts pedestrian and cyclist behavior using past trajectories, road layout, and vehicle motion
- Jointly generates future paths for pedestrians and cyclists, enabling fast prediction in crowds

Key Differentiators

- It accurately predicts VRU trajectories and limits accuracy loss at unseen intersections
- Predicts the behavior of vulnerable road users in blind spots and enables early risk detection

Use Cases

Mobility & Transportation

Intersection cameras predict pedestrian and cyclist trajectories to detect sudden crossings and vehicle conflicts. Alerts are sent to nearby vehicles or traffic-control systems, prompting caution and deceleration to help prevent accidents.

Exhibitors

NTT, Inc. Human Informatics Laboratories