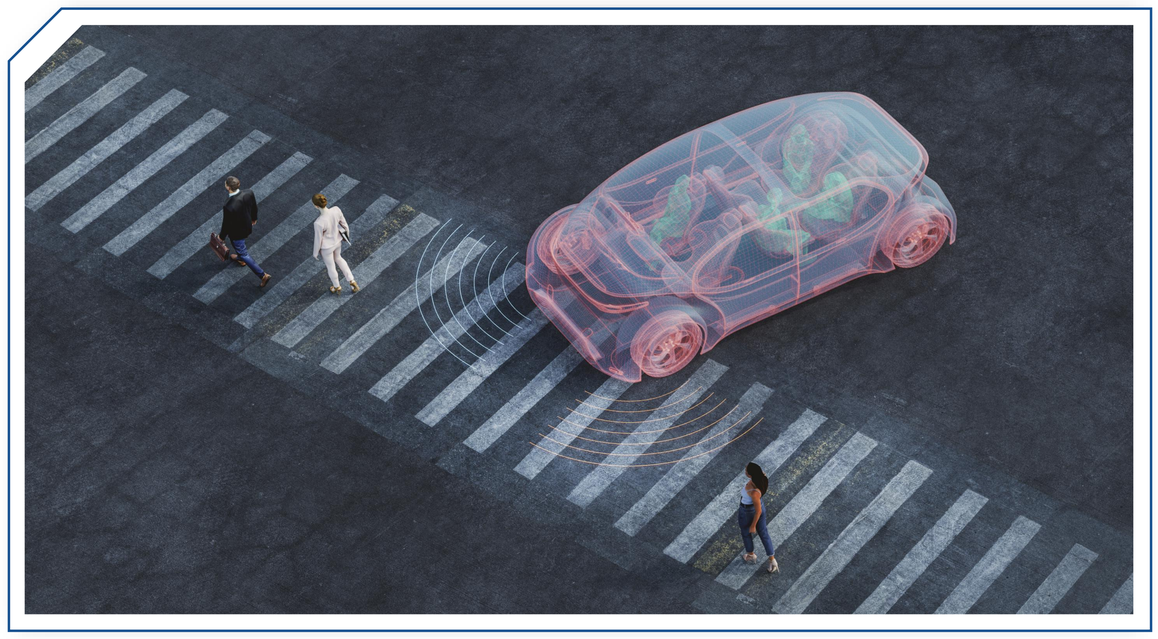
walkBOT

cogniBIT

walkBOT is the next embodiment of our cogniBOT™ AI architecture and realistically simulates human walking behavior in urban environments.

Features include:

- Realistic walking paths
- Avoidance of static obstacles
- Collision avoidance between pedestrians
- Consideration of vehicles
- Consideration of cross walks and traffic lights
- Jaywalking
- Real gaze simulation and consideration of visual occlusions



Realistic Interactions

Instead of using pre-generated trajectories, our simulated traffic agents realistically interact with the vehicle under test at runtime.

Human Limitations

Just like humans, our simulated road users have typical human limitations such as a limited field of view, reaction times or lack of attention.

Human Variation

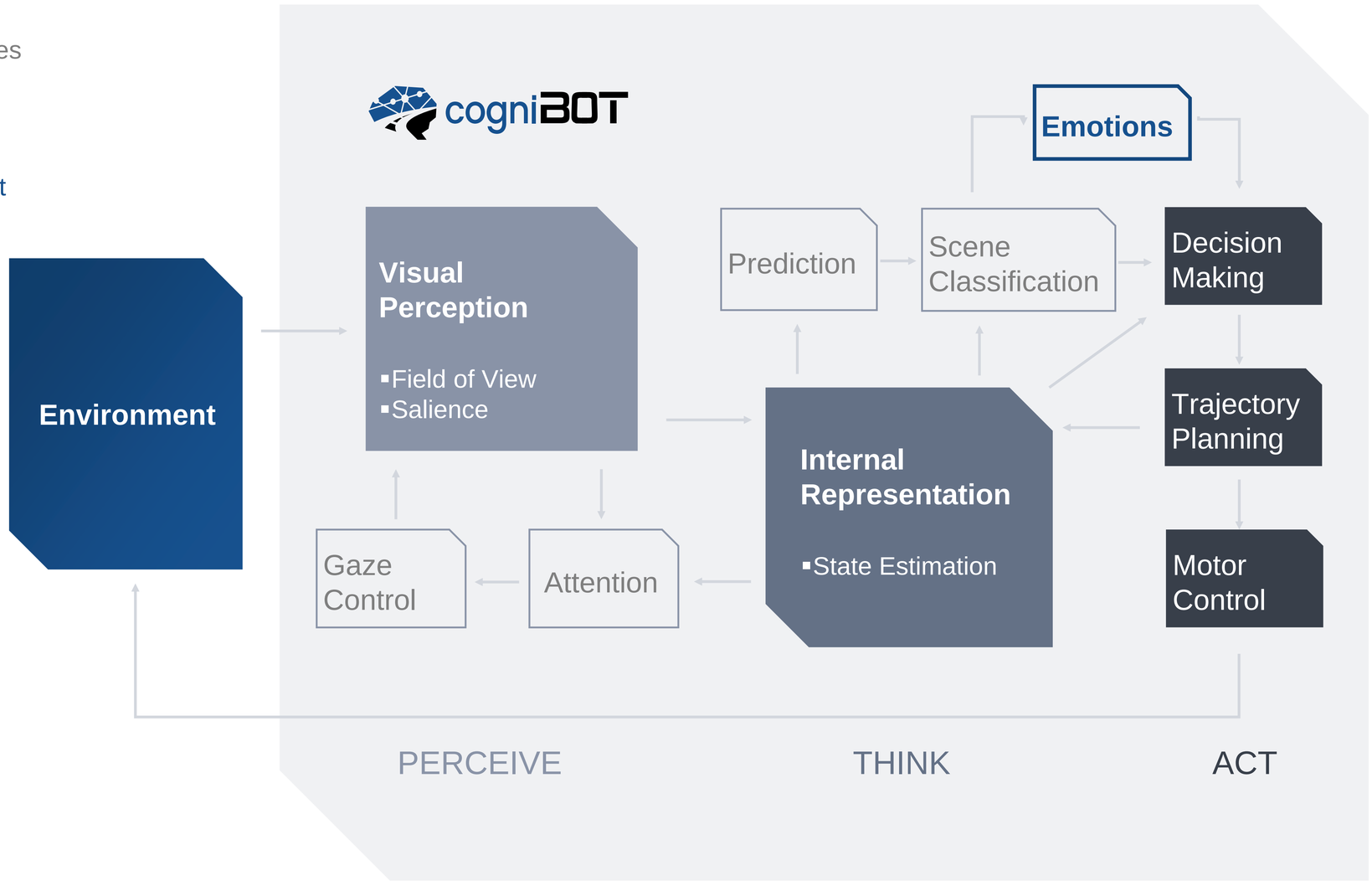
Factors such as age and emotions can be adapted for each simulated individual traffic agent to represent the continuum of human behavior in traffic.

Edge Cases

Systematic variations of scenarios automatically generate plausible and life-like traffic situations including accidents.

- cogniBIT's cognitive AI technology is based on years of neuroscientific research and is able to realistically simulate the human sensorimotor chain of information processing.
- In contrast to purely data-based approaches, cogniBIT's novel technology delivers validated and transparent results even in critical traffic situations.
- Derived from state-of-the-art neurocognitive research, the cogniBOT system architecture realistically simulates human cognition and behavior by modelling the entire sensorimotor chain of information processing:
  Visual Perception, Cognitive Processing, Motor Output
- The sub-models and the resulting closed-loop model of the human behavior are validated against real-world data.
- This approach allows simulation of human characteristics, such as a limited field of view, lack of attention, or distractions.

cogniBOT



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