

Researcher in data fusion approaches for autonomous driving applications



SMART ME UP
a Magneti Marelli company

Company

Smart Me Up is a start-up company designing the new generation of visual perception technologies for autonomous driving systems. The team (8 PhD & 10 AI engineer) focus on scientific research taking a disruptive approach to tackle automotive industry challenges. Recently acquired by a major automotive supplier, we are beginning a period of rapid growth. So, we are glad to provide opportunities for any brilliant and friendly people, lovers of science, and motivated to reduce road fatalities for 1.3 million people per year down to 0 with mathematics.

Position

Smart Me Up is actively hiring for research roles related to sensor and data fusion in autonomous driving applications. The successful candidate will be tasked with exploring approaches to combine data from multiple upstream sensors and perception algorithms in order to extract the maximum amount of reliable information to be passed to an autonomous driving decision system.

Examples of the approaches which would fall under the responsibility of this position:

- Sensor-to-Sensor perception association
- Object tracking (2D, 3D, predictive)
- System cross-verification (identifying perception errors on-line)
- Integration of non-perception data sources (IMU, vehicle state, GPS etc.)

The successful candidate would form part of a dynamic research group pushing the state of the art in autonomous driving, aiming to achieve more with a limited hardware resource budget on embedded platforms. The successful candidate will benefit from the full pipeline of experience from the academic to the tangible, owing to our position in a committed automotive supplier.

Profile

The successful candidate would operate within the Smart Me Up offices in Grenoble, France attached to the Perception research team. They should be able to demonstrate a knowledge of sensor and data fusion techniques, but more importantly a keen eye for innovative problem solving in software systems. Ideal would be a background in design of algorithms robust to imperfect inputs, such as found in robotics, signal processing or data science. A knowledge of physical principles of different sensors (cameras, LiDARs, RADARs etc.) is also appreciated.

They should have familiarity with the Python programming language and ideally with the fundamentals of C/C++ and embedded programming. Naturally, an aptitude for mathematical approaches in computer science is necessary.

Contact

Candidates should send their CV to jobs@smartmeup.io, and are free to contact the same address for any questions on the offer or Smart Me Up itself.