

## Assistance Systems for Mobile Concrete Pumps

<b>Area:</b>	Cartesian control of concrete pumps including collision avoidance
<b>Person in charge:</b>	Wildan Lalo
<b>Duration:</b>	2006 – 2010

A goal of this project is to develop real time algorithms for self-propelled concrete pumps that simplify the large and sometimes redundant operations of the robots. The operation is to take place via a Cartesian and/or cylindrical control of the end-effector and require the installation of a suitable sensor system on the arms of the machine. This makes it possible to avoid an internal collision of the arms without further sensory expenditure. By including environment sensors, it is also possible to avoid collisions with external obstacles and if required plan trajectories avoiding them completely.

