


## BSc and MSc project in the ASPARi research unit

Company and Location	
Type of project	Bachelor
Title of topic	Automatically generating 3D model of construction site environment
Project background / context	One of the main factors in virtual reality applications is how users feel while using the application. Beside the main focus of VR applications, the environment which users see, plays an important role for the final feelings. In this research we are looking for the parameters of a scene which are important for a user to feel him/herself in a real construction site and the applications which makes this process fully automated.
Main research question	Which parameters of a construction site is more important to make final users feel they are in a real construction site on VR applications? Which application gives more information about environment obstacles? Which optimization methods do we need to make the output VR ready (for example low polygon)?
Research method(s)	- Empirical study
Main outputs	Automatically generating 3D model of construction site for using in simulators
Contact(s) at the company	The chosen company will be decided upon in discussion with the student (there are various options)
Start date	ASAP
Contact at the UT	Seirgei Miller <a href="mailto:s.r.miller@utwente.nl">s.r.miller@utwente.nl</a> ; Denis Makarov <a href="mailto:d.makarov@utwente.nl">d.makarov@utwente.nl</a> ; Afshin Jamshidi <a href="mailto:a.jamshidi@utwente.nl">a.jamshidi@utwente.nl</a>