

# Time table: ARCampus Navigation

by Oliver Scheibert (05. 2019 – TBD)

Task	Subtask(s)	Deadline	Status
<b>Research automated positioning system</b>		08.05	Done
	Get information about nearby Wi-Fi signals	08.05	Done
	Research existing Wi-Fi distance tools	08.05	Done
	Research methods for orientation finding	08.05	Done
	Research gyro compass and possible applications with smartphone sensors	08.05	Done
<b>Research marker-based approach</b>		06.06	WIP
	Note information of room plates on floor 3, west – including location, size and picture	17.05	Done
	Detect real-world marker input and match them with digital marker within Unity	21.05	Done
	Use one test marker to adjust positioning and orientation within Unity	01.06	Done
	Make navigation mesh dynamic	06.06	Done
<b>Extend marker-based localisation to one floor</b>		TBD	Upcoming
	Model the floor walls of one whole floor	14.06	Done
	Place marker in model	26.06	Done
	Adjust marker placement with real-world data	02.07	Upcoming
	Identify problems and plan for a strategy to remove them	TBD	WIP

<b>Develop tracking improvement methods</b>		TBD	Upcoming
	Research canny-edge detection and Hough transformation	27.06	Done
	Implement first computer vision algorithm with debugging visualizations	27.06	Done
	Identify problems with image acquisition and fix them	02.07	WIP
	Evaluate Hough transformation results	06.07	Upcoming
<b>Extend 3D model of the campus to full size</b>		TBD	Upcoming
<b>Develop AR-navigation elements</b>		TBD	Upcoming
	Research turn-by-turn navigation		Upcoming
<b>Develop UI interfaces</b>		TBD	Upcoming
	Speak with Joel for unified AR Campus design	21.06	Done
	Develop prototype UI interface with early animations	26.06	Done
	Look into sound design	02.07	Upcoming
<b>Write documentation</b>		TBD	Ongoing
			<b>Deadline: TBD</b>