The aim of the thesis is to propose a robotic farmer emulator. After designing this toolkit, we focus on algorithms solving particular problems related to the use of such a robot. Mainly we attach the question of a route planning during the field processing (while ploughing, seeding and irrigating). The project should help with a design of a real robot which is being designed separately by other colleagues. It should help with the study of feasibility and eliminate particular risks of economic loss (caused by move of a real robot on a field – or outside of it).