

List of Dissertation Abstract (Environment and System Sciences)

Name	Supervisor	Title	Abstract
Takuma MIYAZAKI	Seiya UENO	Study on Simultaneous Optimization of Trajectory and Sequence in Multiple Aircraft Merging Problem	<p>Nowadays, air crafts in the air space is increasing and the workload of air traffic controllers is increasing accordingly. To deal with this problem, it is planned to apply some software in order to support them. The purpose of this study is to propose an algorithm which gives the optimal trajectory and optimal merging sequence in the multiple aircraft merging problem. The problem is defined in an unique coordinate system called Space-Time Coordinate System (STCS). With this algorithm, the work load of air traffic controllers will decrease. Also, it could be said that safety and efficiency of air traffic will be improved.</p>