

Forschungspraxis

Analyze LiFi channel in an aircraft cabin

In the future, more data will be transmitted wirelessly, especially in aircraft cabins. However, cabin channel models are scarce especially for LiFi. Therefore, we have developed a 3D structure of an aircraft cabin in [blender](#). The next step is to develop a statistical description of channel model by adapting an existing raytracing engine such as LuxCore.

Tasks:

- Review of related literature
- Extend existing aircraft 3D model to include lights/LEDs
- Analyze resulting channel effects
- Evaluate the model extensively for different scenarios

Prerequisites

- Working knowledge of python
- Experience with 3D modeling especially [Blender](#)
- Interest in wireless channel models

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Advisors

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