# Combining Vision and Language for Navigating Robots

Navigating a robot in real world using natural language has been a dream for artificial intelligence. Recent advances in computer vision and natural language processing have made this dream much closer than ever before. Researchers therefore propose the task of visual language navigation, in which a robot is required to navigate itself from the start point to the destination, based on natural language instructions. Existing work has reached significant progress in visual language navigation: the robot carries out the natural language instructions very well, navigating itself from the start point to the destination. However, the performance is still far from real world applications.

In this project, as a first step, we will look into the details of previously proposed methods for visual language navigation. We want to understand the internal mechanisms of existing models. Based on previous work, we will then design new methods for improving the performance of visual language navigation.
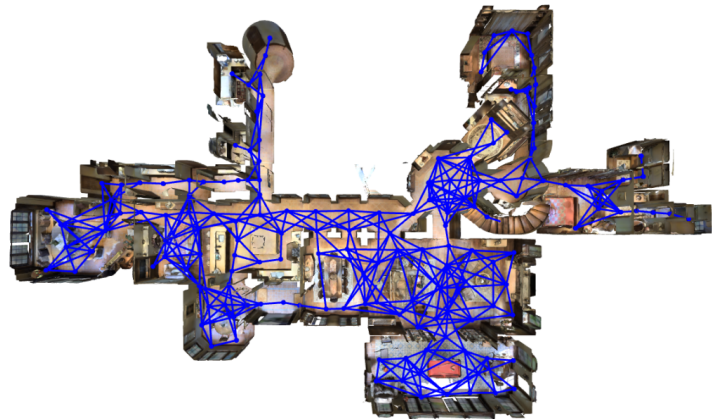
Requirements: Strong motivation, proficiency in Python & PyTorch, and prior knowledge in Deep Learning & Nature Language Processing.

Interested? Please contact us for more details!

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