



# Improve Search Engine Advertisements for Non-English Speaking Travellers

Expedia Group is the world's travel platform, with an extensive brand portfolio that includes some of the world's leading online travel brands such as Hotels.com®, Expedia® and trivago®. They leverage their platform and technology capabilities across an extensive portfolio of businesses and brands to orchestrate the movement of people and the delivery of travel experiences locally and globally.



"We see a critical need to look at leveraging technologies such as ML and NLP to enhance our AI solution to improve the efficiency of search query resolution for Asian languages. With this collaboration, we were able to gather the right data, technology and talents to build a viable AI solution which can enhance search query understanding as well as transform the online search experience for Asian travellers to better serve our consumers in the long haul."

## BACKGROUND

- Search Engine Marketing (SEM) drives a sizable portion of new customers to Expedia.com
- The Japanese market is a key market for Expedia
- Current system of interpreting the intent behind Japanese search queries involves external translation services which are costly

## BUSINESS CHALLENGE


How can Expedia improve the online search experience (better results matching) for non-English speaking/Asian travellers by contextually interpreting Japanese search queries without using external translation services

## AI SOLUTION DEPLOYED


An AI solution was developed to process Japanese search queries and interpret the correct intent behind each query:

- Actual Japanese language search queries were obtained from a search engine
- Text pre-processing was performed in a manner customised to the characteristics of Japanese text
- A pipeline of multiple AI models were trained to identify and contextualise keywords in the queries
- These keywords were then further processed by algorithms to match each query to the most relevant locations and properties of interest
- The developed solution reduces the reliance on translation services

## OUTCOMES



AI Models deployed on cloud platform and exposed to developers who will test the models in a live environment



Reduced reliance on Google Translate and external translation services



Increased relevance and more targeted Search Engine Marketing