

Introduction mini

Chatbots are increasingly used in the Software Engineering (SE) domain since they allow users to interact with platforms using natural language, automate tedious tasks, and save time/effort. This increase in attention is clearly visible in the increase of number of bots related publications conferences and workshops. A recent study showed that one in every four Open Source Software projects (26%) on GitHub are using software bots for different tasks. This is supported by the fact that bots help developers perform their daily tasks more efficiently, such as deploy builds, update dependencies and even generate fixing patches. At the core of all chatbots lie the Natural Language Understanding platforms—referred hereafter simply as Natural Language Understanding. Natural Language Understandings are essential for the chatbot's ability to understand and act on the user's input. The Natural Language Understanding uses machine-learning and natural language processing (NLP) techniques to extract structured information (the intent of the user's query and related entities) from unstructured user's input. As developing an Natural Language Understanding from scratch is very difficult because it requires NLP expertise, chatbot developers resort to a handful of widely-used Natural Language Understandings that they leverage in their chatbots.

Author has explore the impact of selecting different confidence score thresholds on the Natural Language Understanding intent classification performance. chatbots are the conduit between their users and automated services. Through natural language, users ask the chatbot to perform specific tasks or inquire about a piece of information.