

## **FAQ Bots for Freshmen: From AIML to Keras with a stop at Chatterbot - Saurabh Kumar**

### **About the speaker**

I am a M.Tech-Ph.D. Dual degree student at the Electrical Engineering Department, IIT Bombay. I work with Vision and Image Processing Group at Prof. Subhasis Chaudhuri's Lab.

I am a Python enthusiast and have developed multiple workload automation tools while working as a Software engineering analyst for Royal Dutch Shell. I have also written a few similar tools for the EE Department office and various machine learning projects using Python.

### **Abstract**

A newly joined student or professor typically have loads of queries about various processes of the department/Institute. The de-facto go to body for them is the office staff who are usually already busy assisting with various admin work and can't entertain such queries at arbitrary times of the day. The most common way this problem is tackled currently is by putting up lengthy FAQ pages on websites. FAQ bots are a better alternative to this as they give a feeling of having a conversation with the user which is a desirable quality rather than going through dry FAQ pages. Most interestingly, they give the user an experience of having a virtual personal assistant available to them at all times. FAQ bots are a type of artificial conversational agent, which is a field with a lot of research interest lately as companies like Microsoft and Facebook are investing heavily into it.

For the summer admissions 2016, I wrote a simple FAQ Bot using Chatterbot library and a bare-bone flask server. It was hosted at <https://faqbot.ee.iitb.ac.in> for a semester. This talk will be about how to build such chatbots using three different approaches I tried. One with the Chatterbot library and other with AIML scripts and a more recent one that uses a simple artificial neural network written in Keras with TensorFlow under the hood as its backend.