



**GUJARAT TECHNOLOGICAL UNIVERSITY  
(GTU)  
INNOVATION COUNCIL (GIC)  
Patent Search & Analysis Report  
(PSAR)**



**Date of Submission : 09/10/2019**

Dear Gulani Simran Mahendra,

Studied Patent Number for generation of PSAR : 19BE7\_160410116038\_1

**PART 1: PATENT SEARCH DATABASE USED**

- |                                   |   |  |
|-----------------------------------|---|--|
| 1. Patent Search Database used    | : | Google Patents   |
| Web link of database              | : | <a href="https://patents.google.com/">https://patents.google.com/</a>            |
| 2. Keywords Used for Search       | : | Chat bot, NLP, De-stress service, De-stress service application, Renaissance, AI |
| 3. Search String Used             | : | Chat bot   |
| 4. Number of Results/Hits getting | : | 1677   |

**PART 2: BASIC DATA OF PATENTED INVENTION /BIBLIOGRAPHIC DATA**

- |   |   |   |
|---|---|---|
| 5. Category/ Field of Invention               | : |   |
| 6. Invention is Related to/Class of Invention | : | NLP   |
| 6 (a) : IPC class of the studied patent       | : | G06N 3/00   |
| 7. Title of Invention                         | : | System and methods for an emotionally intelligent chatbot   |
| 8. Patent No.                                 | : |   |
| 9. Application Number                         | : | 15/386, 946   |
| 9 (a) : Web link of the studied patent        | : | <a href="https://patents.google.com/patent/US20180174020A1/en?q=Chat+bot&amp;patents=false&amp;oq=Chat+bot">https://patents.google.com/patent/US20180174020A1/en?q=Chat+bot&amp;patents=false&amp;oq=Chat+bot</a> |
| 10. Date of Filing/Application (DD/MM/YYYY)   | : | 12/21/2016  |
| 11. Priority Date (DD/MM/YYYY)                | : |   |
| 12. Publication/Journal Number                | : |   |
| 13. Publication Date (DD/MM/YYYY)             | : |   |
| 14. First Filled Country : Albania            | : |   |

**15. Also Published as**

Sr.No	Country Where Filled	Application No./Patent No.
1		

**16. Inventor/s Details.**

Sr.No	Name of Inventor	Address/City/Country of Inventor
1	Xianchao wu	Tokyo (JP)

**17. Applicant/Assignee Details.**

Sr.No	Name of Applicant/Assignee	Address/City/Country of Applicant
1	Microsoft Technology Licensing LLC	Redmond (US)

**18. Applicant for Patent is** : Company

**PART 3: TECHNICAL PART OF PATENTED INVENTION****19. Limitation of Prior Technology / Art**

Well-trained bots are not available, poor designing of application.

**20. Specific Problem Solved / Objective of Invention**

The key point or objective of invention is to reduce stress faced by youth.

**21. Brief about Invention**

A chat bot may utilize sophisticated natural language processing systems or scan for keywords from a user input and then pull a reply with the most matching keywords or the most similar wording pattern from a database . However , chat bots are often limited to simple task driven conversations .

**22. Key learning Points**

NLP  
Various frontend and backend technologies

**23. Summary of Invention**

The systems and methods as described herein provide emotionally intelligent automated ( or artificial intel ligence ( AI ) ) chatting by determining a context and an emotion of a conversation with a user .

**24. Number of Claims** : 19

**25. Patent Status** : Published Application

**26. How much this invention is related with your IDP/UDP?**

> 91 %

**27. Do you have any idea to do anything around the said invention to improve it? (Give short note in not more than 500 words)**

- Bolster (support) for linguistic minority as well as other languages which will increase the number of user.
- Medical updates before and after chatbot, to check whether user has been actually improvised emotionally.