

**Department of Electrical and Computer Engineering
North South University**



SENIOR DESIGN PROJECT

Robot friend, based on Individual Personality.

“FRIENDZIE”-your new friend with a non-judgemental feature.

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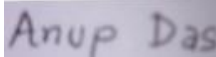
Spring, 2021

Declaration

This is to declare that no part of this report or the project has been previously submitted elsewhere for the fulfilment of any other degree or program. Proper acknowledgement has been provided for any material that has been taken from previously published sources in the bibliography section of this report.



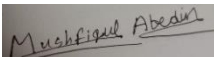
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Approval

The Senior Design Project entitled “Speech Responsive Mobile Robot for Transporting Objects of Different Weight Categories, with Localisation of Sound Source” by Fatema Alam - 1610445043, Anup Das – 1120753045, Md. Harisul Islam Rony – 1621537043 and Mushfiqul Abedin - 1310228042 has been accepted as satisfactory and approved for partial fulfilment of the requirement of BS in CSE degree program on May, 2021.

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Acknowledgement

We would like to thank the members of our project who were associated with this project "Friendzie" and also our honorable mentor A K M BAHALUL HAQUE for his expert guidance. First and foremost we would like to thank Allah for everything.

We are so grateful to North South University for providing us this opportunity.

We are highly indebted to respected mentor for his guidance and constant supervision as well as for providing necessary knowledge and information regarding this project "Friendzie" and also for his support to complete this project. His willingness and constant guidance to share his vast knowledge made all of us understand this project properly and made our work easy as interesting. He also guided us to complete our assigned task on time.

Our project could not have completed without support extends to us by our mentor. We all honestly admit his help meant a lot for us. The way he guided us on time that is really appreciated. His suggestions and his instructions have served the major contributor toward the completion of the project. He also advised us to make this project not only for grade but also for our knowledge.

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Abstract

We are living in 21st century, where technology is evaluating day by day. There are some good parts about this advanced technology while there are some bad parts as well. There are people of different categories in our society. Some people are introverts, they are scared to express themselves in the society, so instead they lock themselves up in their own little bubble. Games like "Blue whale" got popularity just because introverts exist. Our motive is to introduce an artificial best-friend robot named Friendzie, which will provide things you require the most, emotionally. Friendzie will work like a gesture detector robot and provide emotional gesture dependent responding features according to your mood. Those who are shy and introvert can have Friendzie in their life. With the company of Friendzie they can relief stress and express themselves a bit. Through *neural networks* algorithm, a set of data which converts human brain function a try to make a copy of it. Friendzie is such kind of robot that is functioned by one persons based. For example, Joey is introvert, she barely have friends to spend time with. We make survey regarding what Joey loves to do, her hobbies, her favourites song, her favourite books and then insert all the data into Friendzie. Friendzie will be a perfect artificial bestie for Joey. Depression kills people internally. If we consider introverts, they are very weak hearted and barely cope up with *depression* as a result younger people commit suicide which is totally unacceptable. Our motive is to provide Friendzie to those who are introverts and scared to express themselves. Normal people share their deep feelings with friends and take interact with them when they are in confusion. Everyone needs at least one friend in who, they can *confide*. Friendzie is exactly that type of friend for poor Our main motive is to keep Joey busy with the robot. Another important characteristic about Friendzie is, she can move from one place to

another place. Above all, Friendzie will be a perfect artificial friend for those introvert types of people, especially for young depressed youth.

Keywords:

- *Introverts,*
- *Friendzie,*
- *Gesture detector,*
- *Neural networks,*
- *Depression*
- *Confide*