ABSTRACT

Down syndrome (DS) is a genetic disorder that is most common in the world. Known genetic disease due to defective disease is contained in the genetic material in the human body. This disease can not be cured, but it does not make people frustrated. There is still no specific therapy to make people become more independent. The earlier the treatment is done, the better. In this case, it comes to ideas for people with Down syndrome can be detected as early as possible. Of course, the object being detected is the face. Face a special traits that almost all people with Down syndrome.

In this final examination of the ratio of people with Down syndrome face where this theory is inspired by the theory of the Golden Ratio. Measurement of the value of the ratio is done by using a program designed with manual and automatic basis.

The system has an output value of the ratio of the face that is processed by the program. Then I'll look for correlation ratio Syndrome down to the Golden Ratio. But in the final, Golden ratio couldn't use to differentiate down syndrome and normal face. And then, continue to the research and get the new feature point detection that is eye. This final project have accuration program until 87,5 %.

Keyword: Down Syndrome, Face, Golden Ratio