

Ecen 765 proposal

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Introduction: I saw the news that blind people are confused when they were facing captcha. They can use software to help them email or do other things. However, the software cannot read captcha. In the last semester, I read a paper about this problem and I want to achieve this thing with the knowledge I learned in ECEN 765.

Deliverable: I want to design a program to classify different captcha with different knowledge.

Methodology: I want to use the knowledge in homework 1 such as KNN algorithm to deal with this problem.

Resources: I want to design a program to product different captcha.

Progress schedule:

1. Design a program to product captcha with numbers, letters and lines.
2. Design a program by using KNN algorithm to solve the problem.
3. Design a program by using other methods to solve the problem.

Reference:

- [1] Y. Wang, Y. Huang, W. Zheng, Z. Zhou, D. Liu and M. Lu, "Combining convolutional neural network and self-adaptive algorithm to defeat synthetic multi-digit text-based CAPTCHA," *2017 IEEE International Conference on Industrial Technology (ICIT)*, Toronto, ON, 2017, pp. 980-985.
- [2] Saikirthiga and S. Vaithyasubramanian, "Review on development of some strong visual CAPTCHAs and breaking of weak audio CAPTCHAs," *2016 International Conference on Information Communication and Embedded Systems (ICICES)*, Chennai, 2016, pp. 1-4.