CSE585/EE555: Digital Image Processing II Report 1 Mathematical Morphology

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1 Objectives

This project is mainly focus on applying the hit-or-miss transform to detect three middle-size disks. The given binary-valued image considers WHITE to be background and BLACK to be foreground and with five different sized black disks scattered around. The objectives of this project 1 are listed as follows:

2 Conclusion

To conclude our project, we did noise filtering for image preprocessing. Next, we selected the structuring elements, and applied two hit-or-miss transforms for the given structuring elements A and B. Then, the AND operation on these results helped us to detect a certain size of disk. Finally, we combined three middle-size disks' locations on the same image. Last, the member contributions are shown in Table 1. We also want to thank professor Higgins for his lecture notes and hints.

Table 1: Member Contribution Summary

Su, Wei-Kai	experiments
Kuo, Yu-Hsuan	report