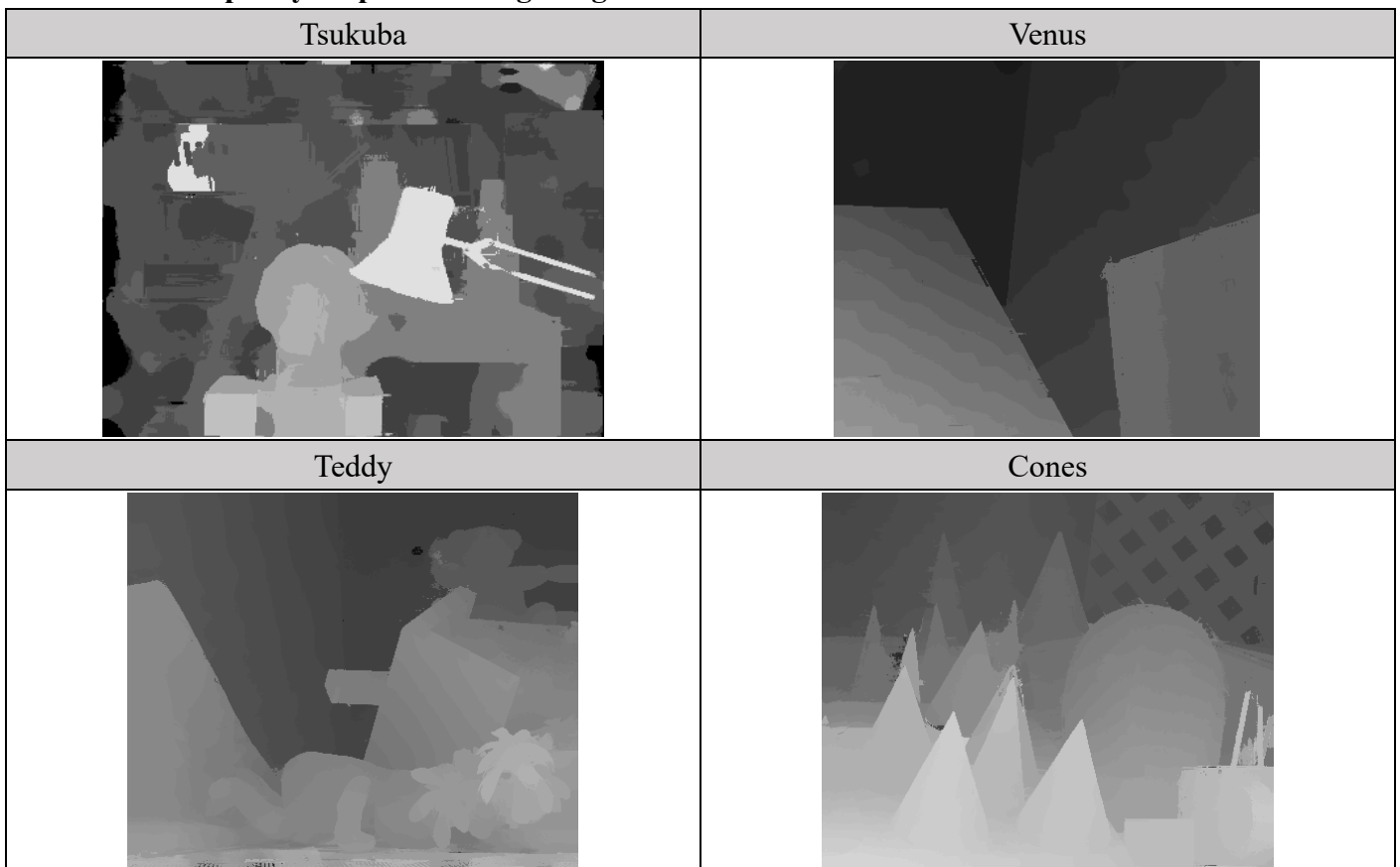


Computer Vision HW4 Report

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Visualize the disparity map of 4 testing images.



Report the bad pixel ratio of 2 testing images with given ground truth (Tsukuba/Teddy).

	bad pixel ratio
Tsukuba	5.03%
Teddy	9.15%

Describe your algorithm in terms of 4-step pipeline.

1. Cost Computation

先算出灰階圖的 8-bit local binary pattern，再利用 xor 計算 cost

2. Cost Aggregation

利用 jointBilateralFilter 以灰階圖為 guidance，來將 cost map 過濾

3. Disparity Optimization

基於 cost，利用 Winner-take-all 策略(取最小值)來得到 disparity map

4. Disparity Optimization

- Left-right consistency check - 將左右不 match 的部分標記為 hole
- Hole filling - 將上一步被標記為 hole 的部分以左邊最近的值或右邊最近的值，看哪個小來填上
- Weighted median filtering - 套用 weightedMedianFilter 進行最後的濾波