Large Scale Wafer Defect Diagnosis using Supercomputer

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Chip production is becoming more and more critical since the COVID-19 hit the world and caused the shortage of the chip supply for the equipment manufacturers across the global. One key to improve the yield of the chip production is to have an automatic wafer defect diagnosis system in place that handle large scale chip production data. Our interest is to apply transfer learning to large scale data to solve wafer defect diagnosis problem using supercomputer. The data we use to validate our method is the WM-811K dataset that contains 811, 457 wafer maps (WM-811K wafer map | Kaggle). The performance measure for our project will be the diagnosis accuracy of the diagnosis algorithm to be developed.