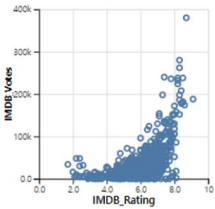


학부생 연구기회 프로그램 (UROP) 공고

담당교수 : 서진욱	Human-Computer Interaction Lab
연구 과제명 : 머신러닝 기반 산포도 (Scatterplot) 시각화 디자인 최적화 및 조정 시스템	
◆ 모집대상 : 학부생	
◆ 모집기간 : ~ 2021년 6월 말	

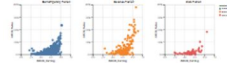
Represent Points Using Outlines
You can reduce the overlapped area by making the center of points transparent



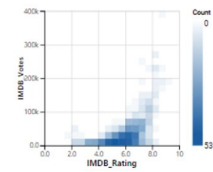
Aggregate Points To Mean Position
You can reduce the number of points by aggregating points to mean position by categories



Separate Graph By Category
You can reduce the number of overlapped points per graph by separating a graph by categories



Represent Density of Points Using Color
You can reduce the number of overlapped points by encoding the density levels of binned positions using color



How can we design and formulate *the most appropriate scatterplot design*?
Among *various candidates*, which one should we choose?

ML-based Scatterplot Design & Optimization System



- Proper scatterplot design depends on various circumstances (user tasks, goals, data)
- We will develop scatterplot design framework leveraging reinforcement learning
- Aiming for a submission to top HCI / Visualization conferences
- *Requirements*: Python programming / Basic knowledge about Machine Learning

