Face2Exp: Combating Data Biases for Facial Expression Recognition



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- Motivation
 - Utilize large unlabeled FR dataset to enhance FER
- Two data biases
 - Class imbalance in FER data
 - Distribution mismatch between FR and FER data
- Key
 - use the circuit feedback mechanism to guide the learning on unbalance FR data
- Contributions
 - A general framework for other face-related tasks that lack high quality data
 - Extract de-biased knowledge from auxiliary FR data
 - Produce low std and high mean accuracy with small labeled FER data (e.g., 5% AffectNet)











