**Summary of “Investigations of Performance and Bias in Human-AI Teamwork in Hiring”**

The research is about a study that looked at the impact of AI-assisted decision-making in the hiring process. The study focused on the "hybrid" relationship between human decision-makers and AI, where human decision-makers have the option to use AI-generated recommendations. The study used a dataset of real job candidate biographies to test how human decision-makers perform with and without the help of three different AI models (random, bag-of-words, and deep neural network). The results showed that high-performing AI models can significantly improve human performance, but can also introduce or exacerbate bias. The study found that the type of AI model used can affect how much the human decision-makers conform to the AI's recommendations and how much bias is introduced, highlighting the importance of carefully considering the AI-human relationship before deployment in real-world situations.

The authors conducted a large-scale study to assess the performance and bias of a hybrid system in the domain of hiring. They used three NLP classifiers as assistance in predicting occupation from candidate bios and tested their performance when used as recommendations by humans. The results showed that different models exhibit different accuracy and bias, with some models mitigating human bias while others increase it. The impact on bias is model-specific. The authors also observed that high-accuracy performance from a non-linear model does not necessarily increase human-model agreement, leading to lower hybrid performance but less biased decisions.

The results provide important insights into human-AI collaboration and algorithmic fairness and raise concerns and trade-offs that need to be investigated before deploying similar models in practice. The study proposes future directions in studying the impact of different ML models in hybrid decision-making.