What ethical considerations should testers keep in mind when validating AI systems, especially when it comes to potential biases and unintended consequences??

The considerations that I have been hearing about recently, that are most frequent, are biases and copyright issues. These biases can range from race to gender. The data that these models are trained on isn't always perfect, in that it does not represent everyone and everything equitably. In Tonya Mosley’s article “If You Have a Face, You Have a Place in the Conversation about Ai”, computer scientist Joy Buolamwini says that “They [datasets] could be 70% men, over 80% lighter skinned individuals. And these sorts of datasets could be considered gold standards.” Clearly, the training data skew towards pale men, so the AI will too. In other words, garbage in - garbage out. Therefore, the developers should be testing for equitable results from their AI models.

The other issue is related to the AI picture generators. Artists are claiming that AI models are using their art to be trained and then generating pictures based on those art styles. Some of these artists are filing lawsuits claiming that the training of AI models does not fail under “fair use”, thus violating copyright law. Developers should be testing for copyright infringement - and potentially legal issues that arise as a result of something their AI model produces.

Mosley, Tonya. “‘If You Have a Face, You Have a Place in the Conversation about Ai,’ Expert Says.” *NPR*, NPR, 28 Nov. 2023, www.npr.org/2023/11/28/1215529902/unmasking-ai-facial-recognition-technology-joy-buolamwini.