# Assignment 1: Finetuning a Pretrained Language Model

Assignment by Gang Jiang

**Github repo:** https://github.com/Gangjiang1/CS6966.git

**Test accuracy:** 'eval\_accuracy': 0.9636

**Analysis:** 10 incorrect predictions and analysis

{"review": "I couldn't believe that the Adult Swim guys came up with this character. I laughed for days just thinking about this show. Having finally seen the pilot I guess I will stick around for a few more episodes. Assy is pretty funny and the whole crew of police show characters are around, but Assy is hard to understand and that was a little frustrating. Most of the humor revolves around the fact that the title character is literally a walking ass with nothing else but legs that sport socks with garters and feet with traditional wing tips. Assy drinks too much and \"plays by his own rules\" as you might have guessed. The only other funny moments are Assy shooting many,many people and spending time at home - in the bathroom. It is not Squidbillies funny, but it is worth a look.", "label": 1, "predicted": 0}

**Analysis:** This prediction just focuses on details, while overall sentiment is positive.

{"review": "This movie is a definitive 5. I finally caught it on HBO the other night. I remember when it came out in theatres telling a friend that it would never be a hit because Americans didn't want movies about history, especially movies that were more about ideas than action. I don't know if that was the reason FMLB didn't do well, but now, having finally seen it, I can add a few observations of my own.<br /><br />First, while Dwight Schultz has been fine in Star Trek and The A-Team, as the lead in this movie he is off-putting. I kept expecting him to shout out Jon Lovitz-like, \"I am ACT-ING!\" He phrasing and tone of voice sounded like he was trying very had to be an ACT-OR, on a stage where he had to emphasize strangely various words and phrases. <br /><br />Second, I enjoyed the sly positioning of Paul Newman's character as a manipulator who, at every turn, strives to herd these cats (the scientists) along to get to his goal. <br /><br />Third, there was some discussion of the moral implications of creating the A bomb, and whether the US should use it. Probably not enough of this, or as in depth as warranted.<br /><br />Finally, there seemed to be an awful lot of twists thrown in for dramatic effect. I don't know how much of the events in this movie are true to life, but things like having the test bomb slip in its chains or having a lab accident caused by a spilled coffee cup (and a scientist killed as a result) were stretching the bounds of believability. Maybe that stuff, or events that were similar, really happened, but it sure felt like various scenes were added solely for dramatic effect, which undermined the whole tone and purpose of the movie.<br /><br />FMLB was OK. I need to read more about the actual events to know if it was over the top or just mostly accurate.", "label": 0, "predicted": 1}

**Analysis:** This prediction has been influenced by the reviewer's discussion of certain positive elements like the lead actor's performance and the use of music, while overlooking the reviewer's overall negative sentiment

{"review": "Man with the Screaming Brain is a story of greed, betrayal and revenge in the a small Bulgarian town. William Cole, wealthy industrialist, winds up with part of his brain replaced by that of a Russian cab driver Yegor. The two couldn't be more different, but they share one thing - both were killed by the same woman. Brought back to life by a mad scientist, William and Yegor form an unlikely partnership to track down their common nemesis.<br /><br />Bruce Campbell returns to the B horror movie genre that gave him his cult status, this time not only in front of the screen, but behind the lens. Unfortunately for this time around, the laughs don't deliver and Campbell has to resort to what he does best to try and fill the gap in this film.<br /><br />As a fan of Campbell, who has the movies, the books and the action figures, I was hoping for another hit to add to my collection. Although, after seeing this film before the purchase, I am glad that I don't have the \"pleasure\" of adding it.<br /><br />The film first goes wrong in the story, which at first sight, seems like harmless fun but turns out to be boring drawn out dribble. Which is a sad thing to say because it was written by Mr. Campbell himself. The comedy never really hits, it only makes us scratch our heads. It seems that Campbell ran out of things that are funny and resulted in giving the audience what we've already seen...him fighting himself.<br /><br />Ted Raimi, the brother of Evil Dead director Sam Raimi, is undoubtedly the highlight of the film. He brings a freshness to it and an entertaining time when the film really needs it. It helps if you are a fan and have been following these stooges from Evil Dead to Xena, which is why I felt compelled to like this film.<br /><br />Campbell's experience as a director, from directing episodes of the TV series Hercules is apparent. Campbell makes the film work well enough, even with the low-budget. In the end, there aren't as many things going for this as one would hope for, but the fans of Campbell will stick behind it no matter what, unfortunately for this fan...I won't.", "label": 0, "predicted": 1}

**Analysis:** This prediction overlooks the transition, there are lots of negative tone.

{"review": "This is a bizarre oddity, directed by the guy who edited \"The Texas Chainsaw Massacre.\" Chuck Conners gives a hilariously over-the-top performance as the owner of a roadside \"wax\" museum which our doomed teenagers happen to break down near. The wax figures look \"so real,\" one of the teen's points out. Heh, heh, heh...Not so much a slasher film as a weird mix of psychological horror and old fashioned \"House of Wax\"-style terror. I can think of many, many horror films that are worse than this one.", "label": 1, "predicted": 0}

**Analysis:** The prediction did not fully understand the last sentence, but only focused on the negative vocabulary itself.

{"review": "Not the funniest movie ever.....but I have to watch this film at least once a year just so I can fall in Love with Michelle Johnson all over again. She never looked better than she did in this film. by the way The story is good too.", "label": 0, "predicted": 1}

**Analysis:** The reviewer focuses on the actor, expressing his negative emotions. The predicted results do not have a good grasp of emotional communication, and only focus on positive vocabulary.

{"review": "HAPPY DAYS was one of my favorite shows when it aired in 1974. But the critics were quick to show their ignorance combined with a total lack of a sense of humor by slamming this show because they thought it was a cheap attempt to cash-in on the success of American GRAFFITTI.<br /><br />There were some similarities between American GRAFFITTI and HAPPY DAYS.<br /><br />Both opened with \"Rock Around the Clock\" by Bill Haley & the Comets. Both took place in a bygone era and both featured Ron Howard as one of the leading roles. But there were also some major differences. While American GRAFFITTI took place in 1962 California and centered around a group of newly graduated high school students about to take that big step into adulthood, HAPPY DAYS took place in Milwaulkee, Wisconson and centered around a group of teenagers in high school, dealing with the joys and tribulations of adolescence.<br /><br />HAPPY DAYS originally opened with the juke box playing the original version of Bill Haley & the Comets' ROCK AROUND THE CLOCK. But when oldies became hot, thanks to the success of American GRAFFITTI, , and the original 1954 version of ROCK AROUND THE CLOCK, entered the Billboard Hot 100 and became a hit again in 1974, royalty payments went through the roof. So a \"remake\" of the song (the correct term is now \"new stereo recording\") was quickly substituted.<br /><br />The current theme song for HAPPY DAYS was then introduced for the second season if memory serves me right.<br /><br />Fans and foes alike agree that this show is escapist. Liberties were taken and details overlooked, making this show less than completely authentic.<br /><br />This is perfectly fine. HAPPY DAYS is supposed to be a comedy, not a history lesson. But occasionally the writers did sometimes stick their necks out by hitting on controversial topics. One episode centered around the Cunninghams building of a fall out shelter. Another episode was about a divorced woman moving into the neighborhood with a dream of starting a new life. The topic of prejudice was addressed when Howard was invited to the wedding of an old army buddy who just happened to be black (in an era when prejudice and discrimination was sadly an acceptable part of the American way of life). The issue of the draft even came up on a later episode!<br /><br />The show as originally set in 1955. One problem that was dealt wisely was with the cast. Most of them were teenagers and as each year passed, it was obvious that they grew older so the series aged with the cast, moving the series out of the safe waters of the Eisenhower years into the Age of Camelot, all the way with JFK and then into the turbulent later half of the 1960s. That, along with the writers running out of ideas, and later, cast members like Ron Howard leaving the series, wisely quitting while they were ahead, left me wishing that they had all done the right thing by pulling the plug on this show and quitting while they were ahead. That, along with the idol worshiping studio audience who just couldn't control themselves every time the Great Fonzie entered the scene, began to wear very thin very fast.<br /><br />This show originally portrayed the Fabulous Fifties as we LIKE to remember that era. Time heals wounds, you know. Everything has its place and though I would prefer hearing the \"original hit versions\" over those \"new stereo recordings\", those \"new stereo recordings\" worked very well on HAPPY DAYS. And this is where I find myself regretting my buying the DVD! Unlike the complete first season DVD, the original music on the complete second season, has been replaced with different music. While it is great that the original episodes were digitally restored to digital perfection, the removal of the original music destroyed what it was that made this show so much fun to watch!", "label": 0, "predicted": 1}

**Analysis:** This text contains multiple aspects of content and information, and excessive information interferes with the model's decision-making, making it difficult to grasp the true emotions of the reviewer.

{"review": "Independent film that would make Hollywood proud. The movie substitutes good looks for good acting, a cryptic plot for a good story line, and self-absorption for character development. May be I missed something, go see it for yourself.", "label": 0, "predicted": 1}

**Analysis:** Without understanding the reviewer’s sarcasm, paying attention to the last sentence may result in correct prediction.

{"review": "I rented this film because I enjoy watching things with Lauren Graham in them. Well, she was the highlight. Everyone else seemed complete separated from the picture. You kept looking around you at those watching the film with you going, what? However she provided some clarity, as she was the only normal character in the picture, which actually isn't saying much for the film. Personally it was too far fetched for me. However, I am glad I rented despite the fact I would never want to own it. I still feel that Lauren Graham proved to be a strong actress and even thought she was not the main character, she seemed to steal the movie. My husband and I were happier and cared more about her character ending up with Josh's character than we were about the two main characters.", "label": 0, "predicted": 1}

**Analysis:** The reviewer only praised Lauren Graham, and the prediction take this part for the whole.

{"review": "For me, Pink Flamingos lived up to it's reputation as being the shocking, disgusting, repulsive, trashy film I was expecting it to be, that really contains everything but the kitchen sink. We are treated to almost two hours of nastiness that never lets up: rape, sex, sex with chickens, transsexuals, castration, murder, cannibalism, and a horrid display of singing out ones anus. It is about a strange couple who begin a competition with a trailer trash family, trying to steal their title as the \"filthiest people alive\". Divine (a fat guy in drag) is an unbelievably vile human being, who actually becomes painful to watch. Trust me when I say that this film is not one to be quickly forgotten, especially the end scene in which Divine eats dog crap off the sidewalk. I have always thought John Waters was over-rated and I cannot say I like this film, but it is an experience if you ever get a chance to see it.", "label": 1, "predicted": 0}

**Analysis:** Although the reviewer is surprised by the content of the movie, and although the movie contains many dark aspects of human nature, reviewer believe that this is a different experience. Prediction only focuses on the dark side of the movie, not the reviewer’s emotions.

{"review": "Chaplin was great a silent comedian, but many silent era stars fell when the public heard their voices in the first talkies. In my opinion, Chaplin's voice simply did not fit his silent characters that made him rich and famous. His career never recovered when sound came to film. Contrary to most of the reviews I have read, Chaplin's lifestyle and politics did not help his popularity with the average viewer who expected to be entertained by Chaplin the comedian, and not spend their entertainment dollar watching Chaplin's political commentary.<br /><br />Despite Chaplin's awards and knighthood, I would take exception to his \"contributions\" to humanity. The Great Dictator was made at the same time Stalin's brutal dictatorship was having it's show trials, and both Dictators signed the agreement that lead to invasion of Poland by both Dictators. WWII started in an attempt to save Poland. The Nazi's were defeated in 6 years, but Poland disappeared as a sovereign country. This happened during the time this film was made and the investigations of Hollywood by the Federal government. Had Chaplin included Joe Stalin in this satire,in addition to including the Italian dictator, perhaps he would have had less criticism about his politics by the politicians. The Soviet's mistreatment of Jews and dissidents exceeded the Nazi's in time and numbers.<br /><br />Judged simply as a film, many of the gags were too topical to be understood by younger viewers, who wouldn't know who Goebbels, Goring or Mussolini were. A classic piece of art must stand the test of time. Classic Greek Tragedy, the Mona Lisa and Beethoven's 9th are still enjoyed centuries after their creation because they are timeless. Films which rely on topical political commentary or currently popular social views usually do not outlast the generation in which they are made. But those that address issues that are common to all generations will probably live forever and receive a high rating from me.<br /><br />Chaplin, as the writer, director and lead actor must take the blame for what I judge as a dated and tiresome film.<br /><br />Chaplin's apologists have excused his decision to leave the country that made him rich and famous. If Chaplin found the US so offensive, why didn't he return to his native land. Great Britian fought the Nazi'with blood and money. What did Switzerland contribute in the fight against the European dictators? Switzerland is like a country club that picks and chooses its members based on race and class, and cares little about people who can't join the club.", "label": 0, "predicted": 1}

**Analysis:** Details such as characters, history, and politics may affect the model's judgment of the entire prediction result. The author only affirmed Chaplin's acting skills. His bad political commentary and directing talent have influenced reviewer’s emotional judgments about the entire movie.

**Shared pattern:**

1. Too many characters, political and historical details can interfere with the model's judgment. How to disassemble these details to better understand may increase prediction accuracy.
2. The model seems to be difficult to detect human satire, and perhaps more such training texts are needed.
3. Models sometimes excessively focus on details while ignoring people's overall feelings, which leads to prediction bias in the model. A larger size model may be beneficial in solving this problem.