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SpCm 212

Section 32

Persuasive Speech

**Title:** Artificial Intelligence in Medicine

**General purpose:** To persuade

**Specific purpose:** To persuade my audience that Artificial Intelligence is a technology that should be implemented in the medical field to help improve treatment and diagnosis quality.

**Organizational pattern:** Problem-Solution-Feasibility

1. **Introduction**
   1. **Attention-getter:** **Tens of thousands of people die every year due to either a miss-diagnosis or late diagnosis that artificial intelligence could have prevented.** **Pathos**
   2. **Audience relation:** I am going to discuss with you today why and how artificial intelligence needs to be implemented into medicine and healthcare.
   3. **Credibility statement:** I am a software engineering student with a focus in machine learning and artificial intelligence and this is a strong topic that I advocate for.
   4. **Thesis:** The medical industry should implement artificial intelligence because it will help improve the quality of medical care.

* 1. **Preview:** Today I am going to be speaking about the benefits of artificial intelligence when it comes to disease diagnosis, bettering patient/doctor relationships and answers to current concerns.

***Transition:*** *To begin, lets talk about the current state of medical diagnosis and how artificial intelligence could be a huge improvement to this field.*

1. **Body**
   1. **Main Point (Problem):** Hundreds of thousands of people are mis-diagnosed and artificial intelligence is the perfect solution to this issue.
      1. First, lets talk about why and how misdiagnosis occur.
         1. Failure to correctly interpret medical results.
         2. Failure to recognize patients symptoms.
      2. One way Artificial Intelligence can produce correct diagnosis is by using decision support systems.
         1. Used to assist doctors when coming to a diagnosis conclusion.
         2. This is currently used to help with cardiovascular and tropical diseases.(science direct)
      3. Artificial intelligence also will benefit the world of medical image and signal processing.
         1. Used in biomedical signal extraction. This helps in epileptic seizure prediction.
         2. Artificial intelligence will help with predictive diagnosis.

***Transition:*** *Increasing diagnosis accuracy is extremely important but so is the relationship you have with your doctor.*

* 1. **Main Point (Solution):** Another important effect of Artificial intelligence is its ability to remove possible uncomfortable situations with physicians.
     1. AI will help reduce social anxieties when going in for a check-up
        1. The ability to provide completely transparent information to your doctor is extremely important but can be hard for some people.
        2. This will also benefit the doctors as they can provide more accurate information with correct information.
     2. AI will help remove any possible negative stigmas you have about doctor’s office.
        1. AI can speed up checkups by lowering wait times.
        2. AI can also result in quicker responses to certain questions you have for a physician.

***Transition:*** *This all sounds great but there are some concerns when it comes to artificial intelligences role in medicine.*

* 1. **Main Point (Feasibility):** There are a couple of reasons AI hasn’t been implemented too extensively in healthcare
     1. Artificial intelligence in any industry could negetivly effect the job market.
        1. **The use of AI is going to reduce work that health workers would otherwise need to do. Logos**
        2. AI also has the possibility of completely removing jobs of healthcare workers.
     2. Artificial intelligence needs to keep up with the development of technology in the health industry.
        1. **As Gallix and Chong described in their article on possible issues of AI, as AI research furthers so does the complexity of medical systems. Ethos**
        2. It is one thing to have a model performing well in a simulated environment, but that same model needs to perform better than doctors when using real data.

***Transition:*** *Even though these downsides exists, research is still being done to make sure these effects to not become issues.*

1. **Conclusion**
   1. **Restate thesis:** Artificial intelligence is a crucial component to the advancement of the medical field and should be implemented.
   2. **Review main points:** In this speech I spoke about how diagnosis accuracy and patient-to-doctor relationships would be improved and also the possible side-effects of artificial intelligence in medicine.
   3. **Action**: It is the job of the audience to be more informed on the topic and support the use of artificial intelligence in medicine. I plan to work on artificial intelligence research to hopefully be implemented in the medical field once I graduate.
   4. **Final statement:** The amount of lives that will be saved by the implementation of even the simplest artificial intelligence is more than enough reason to advocate for its use.

**Works Cited**

\*\*Remember to cite at least 5 sources for this speech. They should be cited in your outline, in your works cited page, and orally. Consult the SpCm 212 Library Research Guide for help with the research process: <http://instr.iastate.libguides.com/spcm212>

Use MLA or APA citation style when citing sources. Here are two useful guides to help you cite your sources:

* MLA Style: <https://owl.purdue.edu/owl/research_and_citation/mla_style/mla_formatting_and_style_guide/mla_formatting_and_style_guide.html>
* APA Style: <http://instr.iastate.libguides.com/styleguides/APA>