W.J,Cunningham. ”Automation.” American Scientist journal 45 (1957): 74-78. Sigma Xi. Web. 18 Nov. 2014.

In Cunningham’s, *Automation*, Cunningham starts off by stating how automation means something different to everyone. The article then goes on to mention how automation has been in industries for years now. The general message of the article is that to many industries, automation is a huge part of the everyday workday. Cunningham goes on to say how automation will proceed to take over more and more of the tasks in the workday. However, the main subject of the article is how the advantages of automation far outweigh the disadvantages. Since this article is fairly old, the information is outdated, however, the message is still relevant to today’s society. This message could also show the process of automation in its early years and how it had been modified to adapt to modern society.

Graham, Dorothy, and Mark Fewster. *Experiences of Test Automation: Case Studies of Software Test Automation*. Upper Saddle River, NJ: Addison-Wesley, 2012. *Safaribooksonline*. Web. 18 Nov. 2014.

*Experiences of Test Automation: Case Studies of Software Test Automation* is a large book which addresses everything from the effects of automation on the individual to industries. Throughout the book, the authors show how automation makes the testing process much more efficient and easy. The book also gives specific numbers to back up the statements. The book also goes into the amount of dedication that goes into making an automated system. While the author does not argue for a specific side, the numbers show that a properly implemented automation system does wonders for industries. This book, will be a great way to show automation and its direct relation to computer science. It will also give some numbers to back up the statements mentioned in the paper.

Davis, Keith. "Individual Needs And Automation." *Academy Of Management Journal* 6.4 (1963): 278-283. *Business*. Web. 18 Nov. 2014.

In the *Individual Needs and Automation*, Keith addresses the impact automation would have on mankind. Keith talks about how automation would open up the creativity of man while fulfilling his own dignity. Automation would do this by replacing time spent on physical labor with time for intellectual prospect. Keith’s main idea is that automation would be beneficial in an industrial organization. And regarding many of arguments points, Keith successfully rebuts them. For instance, concerning unemployment, Keith mentions the utter lack of proof to back up such a statement, and goes on to conclude that automation would give more opportunities to people. Considering Keith’s article deals with the effects and benefits of automation, this source would be a great way to push for the addition of automation.

Cowen, Tyler. "Automation Alone Isn’t Killing Jobs." *The New York Times*. The New York Times, 05 Apr. 2014. Web. 18 Nov. 2014.

Being a professor of economics, Cowen Tyler, brings up some very valid points in his article. Tyler brings up the “waves of innovation” that society has seen throughout history. He then goes on to say that, the people afraid of mass unemployment need to adapt. By using the steam engine of the 19th century as an example, Tyler shows how innovation leads to more jobs. The main message is a message of adaption. Automation will change industries at a time, the workers will have to adapt to a more service oriented work cycle. This article relates to how automation affects the jobs and the economics of industries. This will be useful to show how automation will be a positive influence to business.

Chatfield, Tom. "Can We Design Machines to Automate Ethics? – Tom Chatfield – Aeon." *Aeon Magazine*. N.p., n.d. Web. 18 Nov. 2014.

Chatfield’s article regarding the hard programming of artificial ethics brings up very interesting points. The article points out the difficulty of giving a binary machine the ability to make ethical decisions. Because computer systems are so black and white, programming ethics and decision making quite troublesome. The main argument of the article is to point out, how we programmers, can program an automated program to make decisions which we can’t feasibly make ourselves. This article will be useful to show how programming relates to the automation process. It also relates automation to ethics are artificial intelligence, which are very relevant to the computer science field.

**Automation and its relation to Computer Science**

Automation is something that affects us all whether we know it or not. For a business owner, it is a way to cut costs, for a programmer, it is a way to increase efficiency, and for the factory worker, it is considered to be a harbinger of unemployment. Ever since the industrial revolution, automation has been with us. It can be seen in everything from apps in the app store to the steam engine. Automation plays an enormous part in everyday life and because of this, it is a major aspect of the computer science field. Computer science plays a large part in automation because, the process of automating processes involves a lot of programming. This process consists of creating an algorithm that essentially replaces a person job. This is also why ethics plays a large part in this process. Basically engineers are working together to reach a common goal, which will inevitably replace a human being. For computer science majors, this means to write lines of code to replace multiple workers. While automation is a carrier of progression, many people are opposed to this change. Automation is a way to make processes more efficient, cheaper, all the while making society more intelligent. While automation does replace the menial jobs in industries, these jobs are replaced by those who adapted to the industries changes. This paper will argue that the benefits that automation brings to table, outweigh the temporary drawbacks. Through the increase in efficiency that automation will bring, along with the overall intelligence increase of the work force, industries will be shaped one by one.