Department of Electrical Engineering and Computer Science
College of Engineering and Computational Sciences
Colorado School of Mines

EENG 389L: Lab for Fundamentals of Electric Machinery

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Statement of Assignment:

The goal of this assignment is to look into the life and scientific contriubutions of a pioneer in the areas of electromagnetism. I chose to look at Andre-Marie Ampere

Summary:

Andre-Marie Ampere was born in France in 1775 to a wealthy merchant. His father made his library available to Ampere and found that he was exceptionally interested in the area of mathematics. He went so far as to learn latin so that he could study the works of Leonard Euler and Daniel Bernoulli. After a hectic early adulthood, Ampere ended up in Paris working as a professor [1].

It was here that Ampere made his most notable discoveries, the most profound being the creation of the field of electrodynamics. This entails the idea that magnetic fields are the products of moving electric fields. After being shown that a compass needle is affected by a magnet, he experimentally deduced that current carrying wires can attract or repel each other according to now what is commonly known as Ampere's Law. Another concept credited to Ampere is a precursor to the modern electron. He postulated the existence of an "electrodynamic molecule" which gave rise to the electromagnetic fields he was observing at the human scale. [2]

Bibliography:

[1] adelaide.edu, 'Famous Scientists who have impacted Electrical and Electronic Engineering', 2013. [Online]. Available: https://eleceng.adelaide.edu.au/about/history/famous-scientists/. [Accessed: 27- Aug-2018].

[2] wikipedia.org, 'André-Marie Ampère', 2018. [Online]. Available: https://en.wikipedia.org/wiki/Andr%C3%A9-Marie_Amp%C3%A8re. [Accessed: 27- Aug- 2018].