**ECE Capstone program**

**Spring 2020**

**Project Abstract & Info**

**1. Project number**: S20-37

**2. Project title (as will appear on the poster)**:

Legal Advisor

**3. Team members**:

Andrew Sengupta, Amandip Kaler, Jeffrey Lu, Aditya Mehta

**4. Adviser(s) name(s)**:

Ivan Marsic

**5. Up to 5 keywords that will help to classify the project scope**:

NLP, US, Code, Public, Advisor

**6. Project abstract (up to 250 words) to be shared with judges**:

The field of NLP started in 1950 when Alan Turing published “Computing Machinery and Intelligence”, today, although no machine can pass the Turing test, over 70 years we made breakthroughs in language training models.

The number of United States citizens needing legal guidance is growing by the day, and it is extremely expensive to hire a lawyer. The average cost of a defense attorney is $150 - $700 per hour, and it is not uncommon for bills to reach tens of thousands. Unfortunately, it is quite hard for the average person to learn anything about the legal system because legal language is tricky, wordy, and hard to decipher without any prior knowledge.

The objective of our project is to create an intelligent research tool that employs natural language processing to search relevant United States code from the given brief of a case. This would make it much simpler for the average citizen to be able to simply look up a law and what it entails.

The approach to accomplishing this task is to implement natural language processing using PyTorch, specifically training convolutional neural network classifying applicable titles of the US code to the given scenario.