**DePaul CSC672**

**Capstone Group**

**Team Name**

CAD-X

**Team Members**

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**Team Lead**

Brian Craft

**Project Title**

Using Computer Aided Diagnosis to Aid Cancer Screening and Diagnosis

**Significance of Project (one paragraph)**

Despite vast medical improvements, cancer remains one of the leading causes of death. Because image based diagnosis is subject to opinion and not always conclusive, further procedures must be performed which are invasive, expensive and cause mental hardship on the individual and their family. Improving the accuracy of image based diagnosis would allow for more accessible and desirable cancer screening and diagnosis loosening the emotional burden, speed of diagnosis and hopefully resulting in general screening practice that allow late stage cancers to be caught earlier in their life cycle. However, because radiologic interpretation still remains subject to a great deal of inter-expert variability when it comes to interpretation and subsequent diagnostic recommendations, we propose exploring probabilistic machine learning that will attempt to assess the likelihood of malignancy of radiographic lesions which can then be used to aid in the screening and diagnostic processes.