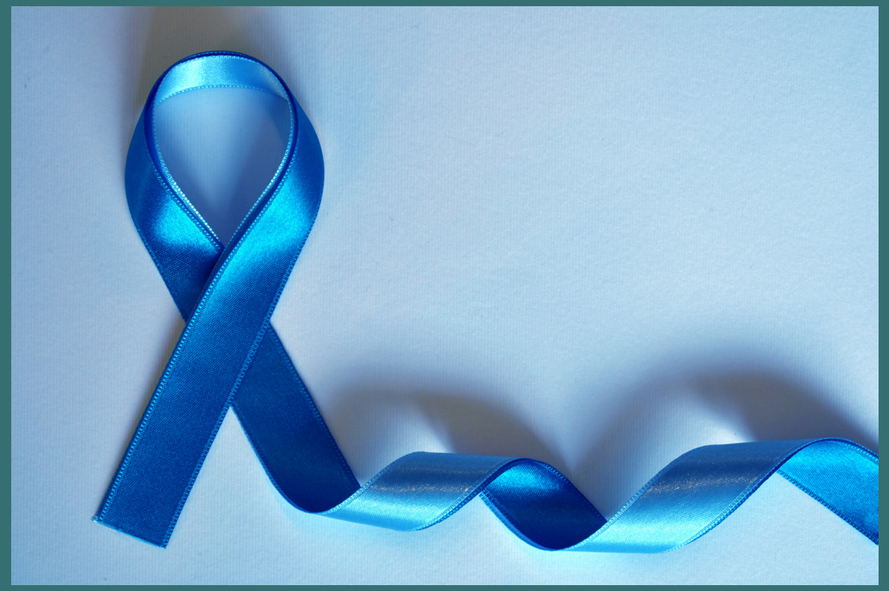
Cherry Blossom: A Polycystic Ovary Syndrome Detection Model using Convolutional Neural Networks.



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Background Information

PCOS is a complex disease that affect 5 to 10% of female population of reproductive age and is characterized by a wide range of symptoms such as irregular menstrual periods, acne and ovarian cysts. Diagnosis of PCOS can be challenging with many women having to wait for an average of 2years to get the right diagnosis.

To overcome the issue of manual diagnosis a machine learning model using CNN was developed.

Motivation

- Misdiagnosis
- Shortage of medical personnel
- Available resources
- Low cost of development

Designed Solution

The designed solution was a CNN model that detected presence of PCOS from ultrasounds. The dataset used was from kaggle. It contained 3856 images divided into two testing and training. All images were already labeled as infected or not infected.

System Architecture