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Why Breast Cancer?

Think about one person close to you who has had cancer.

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Why Breast Cancer?

Breast cancer is the most common form of cancer in women. It is a devastating disease.

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Why Breast Cancer?

Accurate, fast detection is vital to find this kind of cancer as early as possible.

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Project objective

What if we could diagnose cancer with greater accuracy using AI?

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What if we could diagnose cancer with greater speed using AI?

Overview

We set out to diagnose breast cancer from 250,000 samples with a 90% accuracy using machine learning CNNs.

Overview

With our current models, we were shy of our goal but consistently hit 85% accuracy.

How We Did It

Gathered microscope images of breast tissue from 162 patients.

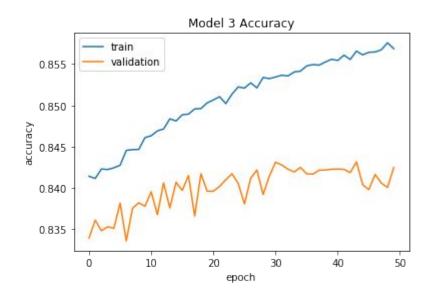
How We Did It

Gathered microscope images of breast tissue from 162 patients.

Tagged and ran these 250,000+ images through neural network.

Our Results

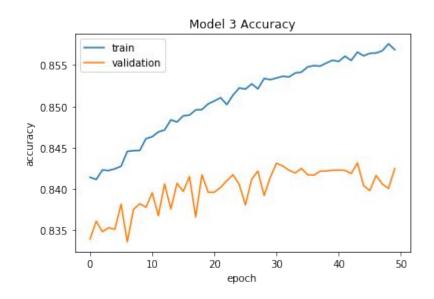
Our models performed between 83-85% accuracy.



Our Results

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This is good, but we can improve on these numbers.



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Increase the pixel size and number of images provided

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Tweak the inner workings of convolutional neural network

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Use color images instead of grayscale images

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Balance the amount of images in each category

Thank you.

