

Cloud-Based Storage, Image Reconstruction, and Visualization for Breast Cancer Imaging

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Why is Breast Cancer Screening Important?

It is estimated that over **28,600 Canadians were diagnosed with breast cancer** in 2022, which represents 25% of all new cancer cases in women. Early breast cancer detection can help bring this number down.



Our Sponsor: Wave View Imaging

Breast cancer screening procedures use large machines that are not portable out of radiology clinics. Our sponsor, Wave View Imaging, has created an alternative to traditional x-ray based mammography techniques, that uses microwaves instead, resulting in a smaller, portable imaging machines with comparable breast-cancer-screening effectiveness.



The Problem

Currently, WVI's software runs as a custom desktop application, which requires a powerful computer to operate and technical knowledge to set up and configure properly. This means clinics using WVI's imaging device are required to pair the imaging machine with large, expensive computers and have staff trained to install and run the software!

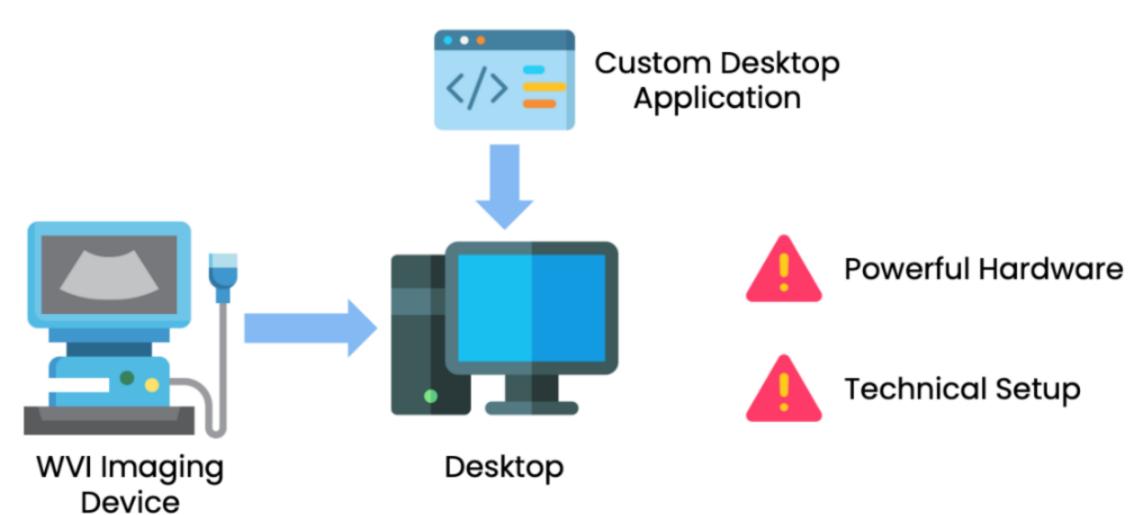


What is The Cloud?

Cloud-based storage is a form of storing digital data that is accessible from any location and device. Processing on the cloud allows flexible usage and pricing, data protection, and backups.



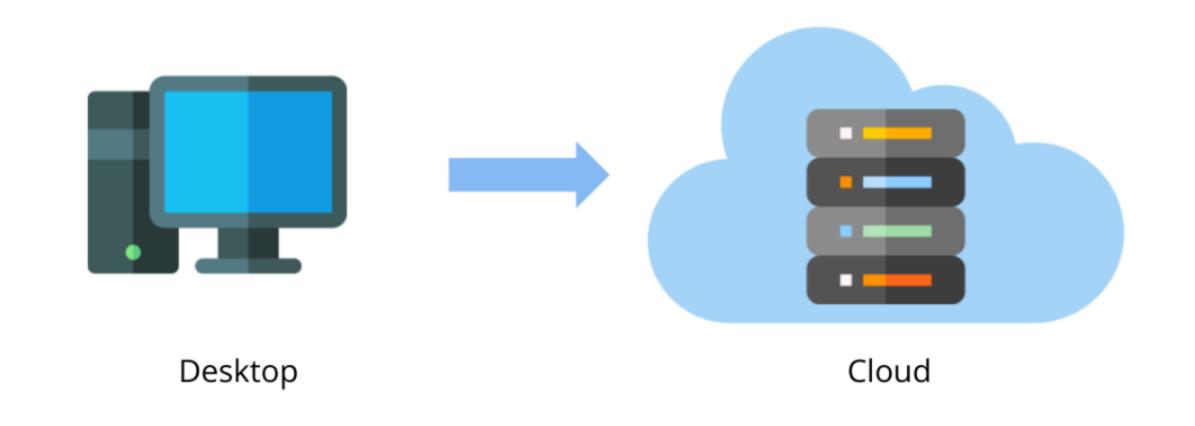
Dur Solution



We are transitioning Wave View Imaging's (WVI) image processing technology from a desktop app to the cloud. Our solution uses Amazon Web Services, which provides reliable and scalable cloud computing services.



The WVI Portal



Using our WVI portal, medical professionals will have easy access to their patient's breast cancer images. Images are automatically reconstructed from raw data provided by sensors and displayed in multiple views for the physician.

Nov 2022 Sept 2022 Feb 2023 Present

Initial Design Deploy to AWS Development Prototype







