



Pervasive DataRush: For High-Volume Medical Image Processing and Analysis

Leverage the Power of Multicore and Accelerate Image Classification and Region of Interest Analysis

Multicore Image Processing Capabilities Help Healthcare Professionals to Improve Patient Care

Pervasive DataRush™ for Imaging provides the capability to process and analyze high volumes of medical images at game-changing speeds on a multicore server. It dynamically scales to the number of available cores so more cores = more speed. Performance speeds on a single server with Pervasive DataRush have proven to be as much as 12x faster than clustered servers. The ability to run on readily available multicore servers also means that high-volume image analysis can be done locally and in-line, virtually eliminating the time between acquisitions, central processing and interpretation.

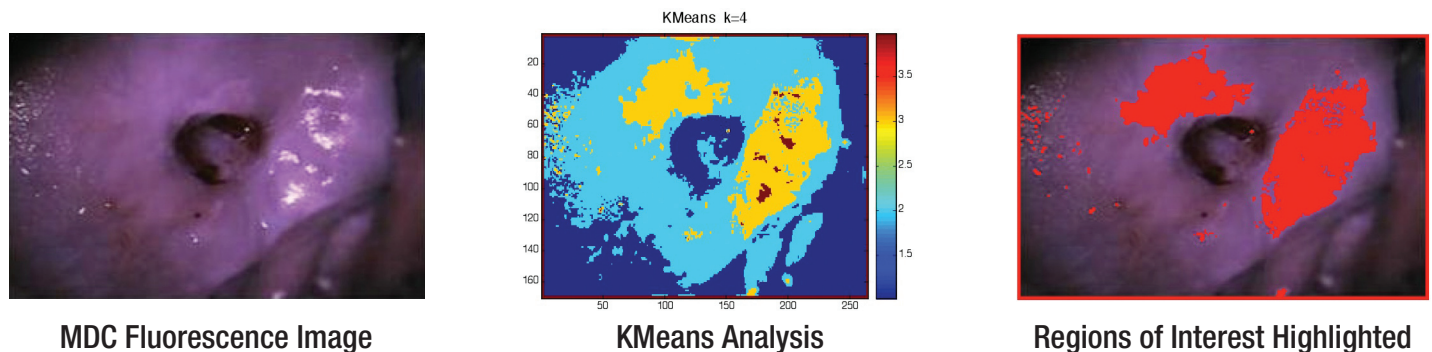
Biomedical Imaging Processing

Pervasive DataRush for Imaging helps overcome the constraints of “heap” size in image reconstruction for even massive files sizes and volumes of Computed Tomography (CT) scans, MRI, X-Ray and ultrasound. Independent tasks like CT reconstruction, filtering and feature extraction can occur concurrently using the Pervasive DataRush dataflow computational model. This fast pre-processing enables multiple iterations of image enhancement and better accuracy of object identification.

Accelerated Insights and Analysis

In hospitals, research facilities and other environments, where millions of images (i.e., terabytes of data) require processing, Pervasive DataRush helps to automate the tedious task of manually classifying and identifying Regions of Interest (ROI). By providing rapid processing speeds that can be done on local and in-line systems, Pervasive DataRush drives improved analysis that can result in better patient outcomes.

The example below illustrates the capability to identify abnormal areas in an image through the application of classification algorithms.



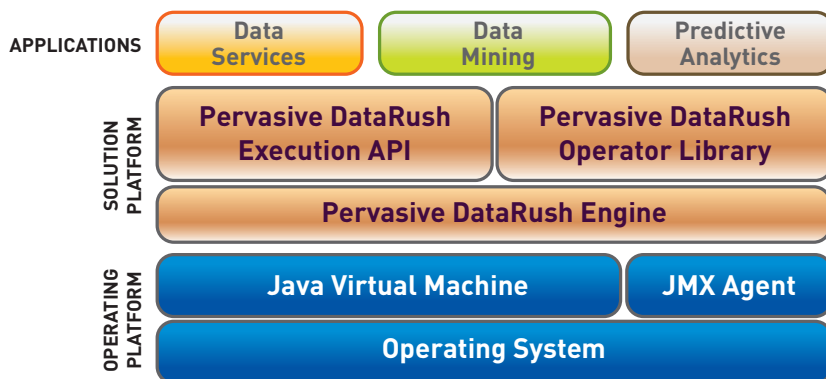
REF: Image source - Multispectral digital colposcopy for in vivo detection of cervical cancer. Juan Manuel Benavides, Sung Chang, Sun Young Park, and Rebecca Richards-Kortum Department of Biomedical Engineering, The University of Texas at Austin, Austin, Texas 78712

Pervasive DataRush

Pervasive DataRush is a revolutionary technology that is changing the paradigm for processing, cleansing and analyzing images. The platform enables solutions involving large and/or disparate data sets to perform at **unprecedented speeds** with **increased accuracy** on a much **smaller computing footprint**.

Its dataflow computational model provides pipeline, vertical and horizontal partitioning, and dynamically spawns multiple threads to provide concurrent processing – resulting in increased performance and data scalability.

Pervasive Software invites you to learn more by contacting Pervasive DataRush at 1-866-980-RUSH (7874) or info@pervasivedatarush.com.



About Pervasive Software

For over two decades, Pervasive has helped thousands of customers around the world in every industry to manage, integrate and analyze their data. Pervasive DataRush is an embeddable software platform solution for data-intensive processing applications such as claims processing, risk analysis, fraud detection, bioinformatics and life sciences.

Contact Us

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Benefits

- Improve patient care by classifying and analyzing images faster
- Automate manual and time consuming tasks
- Localize image processing and in-line analytics
- Lower energy and maintenance costs with reduced hardware requirements

PLATFORM SUPPORT

Design-Time Platforms and Runtime Operating System Prerequisites

- Windows
- Windows XP
- Windows Vista
- Solaris
- IBM AIX
- Red Hat Enterprise Linux
- SUSE Linux Enterprise
- HP-UX

Processors

- Any Intel or AMD 32/64-bit CPU
- Any Sun SPARC 32/64-bit CPU
- Any IBM POWER Architecture 32/64-bit CPU

Java 6 JVMs