Exploitable Results by Third Parties

14001 3DPathology

Project details

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Name: DCGMM histopathology stain-color normalization		
Input(s):	Main feature(s)	Output(s):
DCGMM Source Code	DCGMM is applied for histopathology stain-color normalization	Color-normalized images
Unique Selling Proposition(s):	Fully-unsupervised generative model learns the color distribution among the images and transforms it to resemble the color distribution in an arbitrary template image.	
Integration constraint(s):	▪ Python 2.7 ▪ TensorFlow 1.5.0	
Intended user(s):	▪ Application developers or research engineers in computational pathology that have interest to exploit GPU capabilities. In histopathology CAD system developer, this module can be used as a pre-processing stage prior to further image analysis such as tumor detection or metastasis grading .	
Provider:	▪ Eindhoven University of Technology – VCA research group. ▪ https://github.com/FarhadZanjani/Histopathology-Stain-Color-Normalization	
Contact point:	▪ Farhad G. Zanjani – f.ghazvinian.zanjani@tue.nl	
Condition(s) for reuse:	▪ Free license	

Latest update: 25 June 2018

Name: 3D Reconstructor for 2D stack images		
Input(s):	**Main feature(s)**	**Output(s):**
▪ 2D Mass Spec Imaging Data	▪ Recombining rotated, skewed, stretched 2D images to one 3D data block ready for 3D viewer	▪ 3D Mass Spec Imaging Dataset
Unique Selling Proposition(s):	▪ Automated reconstruction of 3D block image from 2D stack image, making use of optimized number of channels ▪ Working with different image data types	
Integration constraint(s):	▪ Versatile Interfacing ▪ No special OS requirements ▪ Algorithms can run on instrument's computer ▪ Ongoing development with MSI hardware / resolution improvement	
Intended user(s):	▪ MSI Instrument Suppliers, Research Organizations ▪ 2D-from-3D imaging developers and suppliers	
Provider:	▪ Target Holding B.V.	
Contact point:	▪ dr. Rolf Neubert, rolf.neubert@target-holding.nl	
Condition(s) for reuse:	▪ Commercial license on annual basis to be negotiated ▪ University license to be negotiated for special rates	

Latest update: 25 June 2018

Name: VISPAT 3D Viewer (digital pathology web-based player)		
Input(s):	**Main feature(s):**	**Output(s):**
- Digital pathology images - HPC - Big Data	- displaying 2D/3D medical image/models based on very large files - pan, zoom, rotate the 2D/3D images - take screenshots for both 2D/3D images - use filters (contrast, brightness, erosion, dilation, invert, grey scale, convolution) that can be applied to each image or model, for any zoom level in 2D/3D mode; - download sample/test files; - share models between users through internal unique codes - dynamically model generation based on atlas files - dynamically generation of atlas files based on provided image files 2d perspectives on each of 3D axes (X, Y, Z)	- Analysis of relevant areas from medical digital images - Provides web-based visualization of medical data - Suitable for different platforms
Unique Selling Proposition(s):	- Dynamic application for big 2D/3D images visualization - Source to source tool to generate fast access and displaying big images - Auto adaptive library for different types of data/images	
Integration constraint(s):	- Suited for heterogeneous platforms (CPU/GPU on HPC) - Node.js - Three.js - X3dom - Caman.js - Openseadragon.js - Bootstrap - Openseadragonfiltering.js - Require.js - Upload.js - DZI (deep zoom images) - Connector.js - Download.js - make2D.js - make3D.js	

Name: VISPAT 3D Viewer (digital pathology web-based player)	
Intended user(s):	- pathologists - clinicians - researchers in digital pathology - students - web 3d practitioners - doctors
Provider:	ALTFACTOR SRL, Romania, www.altfactor.ro , www.3dpathology.ro
Contact point:	Marius Petrut IVANOV, marius.ivanov@altfactor.ro
Condition(s) for reuse:	End-User License Agreement (EULA)
	Latest update: 25 June 2018

Name: Mobile 3D Pathology Viewer (pathology viewer based on mobile technologies)		
Input(s):	**Main feature(s):**	**Output(s):**
▪ Digital images ▪ Big data images	▪ displaying 2D/3D images from different modalities on mobile devices ▪ pan and zoom the 2D/3D images ▪ Rapid pre-viewing of 2D/3D Pathology high-resolution datasets. This volume can be moved, rotated, zoomed, etc.; ▪ Fast performance and accessibility from everywhere; ▪ Intuitive and interactive user interface; ▪ Flexibility with both high and low-level control; ▪ Interactive remote visualization of multi-modal 3D image	▪ Viewing of relevant areas from medical digital images ▪ Provides mobile based technologies for medical data visualization ▪ Suitable for different mobile devices

Unique Selling Proposition(s):	▪ Mobile application for big images visualisation ▪ Fast integration on different platforms ▪ Accessible for any mobile device regardless of the device's performance: PC, laptops, mobile devices
Integration constraint(s):	▪ Client-Side Storage ▪ Slower processor speeds ▪ Wireless network connections with latency ▪ Smaller screen that can display a limited area of the medical images
Intended user(s):	▪ pathologists ▪ clinicians ▪ researchers in digital pathology
Provider:	▪ SIVECO, Romania; www.siveco.ro; www.3dpathology.ro
Contact point:	▪ Dorothea Caraman, dorothea.caraman@siveco.ro
Condition(s) for reuse:	▪ Mobile Application End-User License Agreement (EULA)

Latest update: 25 June 2018