



# Release Notes for HCA-Vision Neurite Analysis Module V1.1

## **Introduction**

These release notes describe system requirements, installation instructions, and known issues for HCA-Vision Neurite Analysis Module V1.1.

These release notes are updated each time when we have major releases, so please check back for new information.

Upon receiving feedback or bug reports, we will resolve the bugs and release patched versions until the next major release. For example, patched versions 1.1.1, 1.1.2, ..., shall be released before the major release V1.2.0.

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## **System Requirements**

### **Software Requirements**

- Windows XP Professional with Service Pack 2 or Windows 2003
- Microsoft .Net Framework 1.1

### **Hardware Requirements**

- PC with 550 MHz Intel Pentium processor; 1 GHz or faster recommended
- 512 MB of RAM required; 1 GB or more of RAM recommended
- 200 MB hard-disk space required; 1 GB or more hard-disk space recommended

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## **Installation Notes**

### **Manually Uninstalling Previous Versions of HCA-Vision When Upgrading**

- Go to the Control Panel and launch Add/Remove Programs.
- Remove "HCA-Vision".
- Remove "Microsoft .NET Framework".

### **Installing HCA-Vision**

- Insert the HCA-Vision Installation CD into the CD-ROM or DVD-ROM drive.
- The CD should start and run automatically. If it does not, double click the “DEFAULT.HTM” file on the CD.
- follow the instructions the installer provides.

For detailed Installation Instructions, please see <http://www.hca-vision.com/support>

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## **New Features and Fixes**

### **Features**

- Sensitive and robust detection of neurites, even in the presence of variable background brightness, variable neurite staining, high cell densities and high levels of neurite interconnections.
- Detailed and biologically relevant features describing the complexity of neurite branching including measurements of neuron and neurite features in various depth of morphology.
- Detailed intensity measurements for nucleus, cytoplasm, donut, membrane, neuron body and neurite.
- Powerful image pre-processing utilities.
- Batch processing using pre-tuned neurite analysis parameters stored as parameter profiles.
- Step by step wizard leading users to fine-tune most parameters with a “Drag-N-See” feature – users can drag scroll bars of individual parameters and then directly see the real-time response in intermediate results.
- Rich outputs – results are reported in various formats including result images, crystal reports, tabular result display and figures, which can be easily exported or saved as different formats such as TIF/JPEG/BMP/GIF, PDF, Excel, Word, Rich Text etc.
- Three-way cross referencing showing correspondences among statistical results in the tabular neurite analysis report, neuron bodies in the original image and the result image.
- Storing parameter profiles for batch processing or future reuse.
- High speed – underlying algorithms have been optimised over ten years of intensive use.
- Many image formats – can read over 140 different image formats.

### **Fixes**

- Wrong colours displayed in overlaid result images.
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## **Deprecated Features**

Nil.

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## **Outstanding Issues**

- Pre-processing procedures are not conducted when using a pre-saved parameter profile to carry out neuron body detection, neurite detection or neurite analysis.