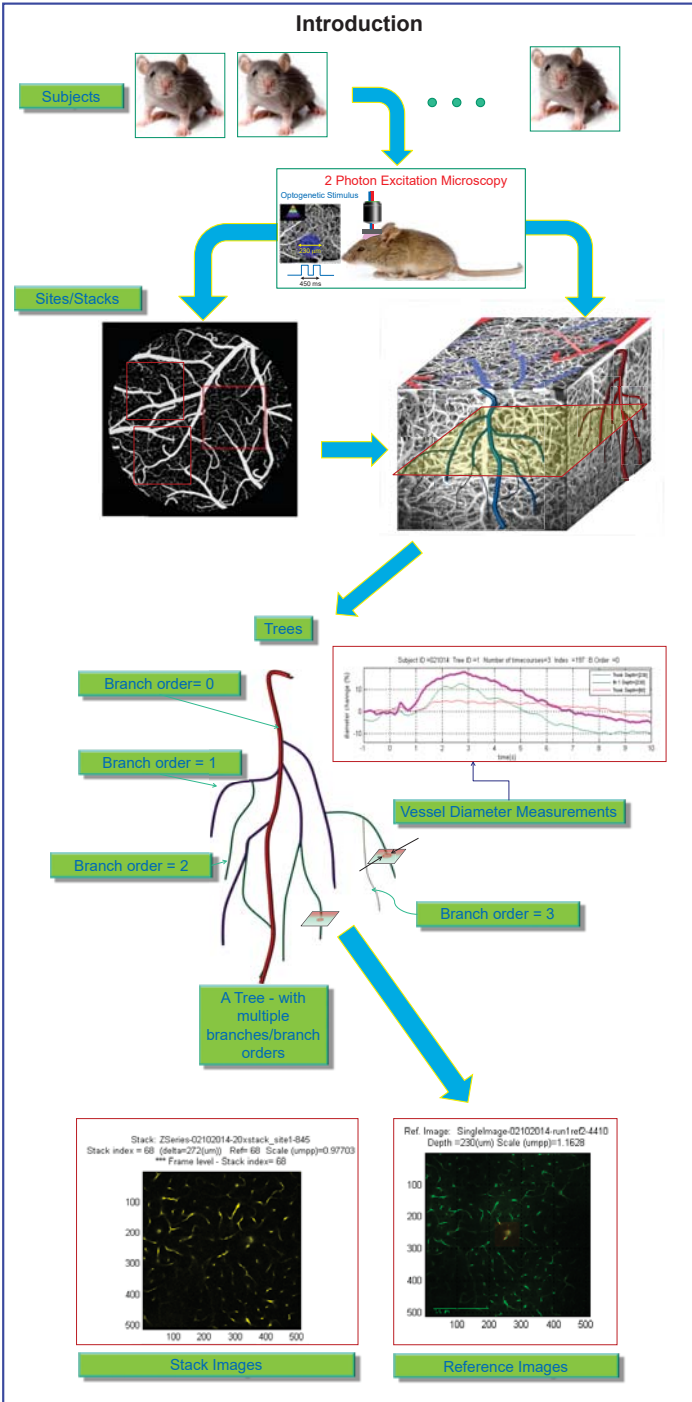


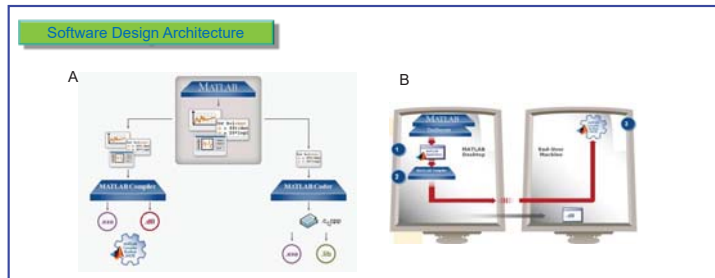
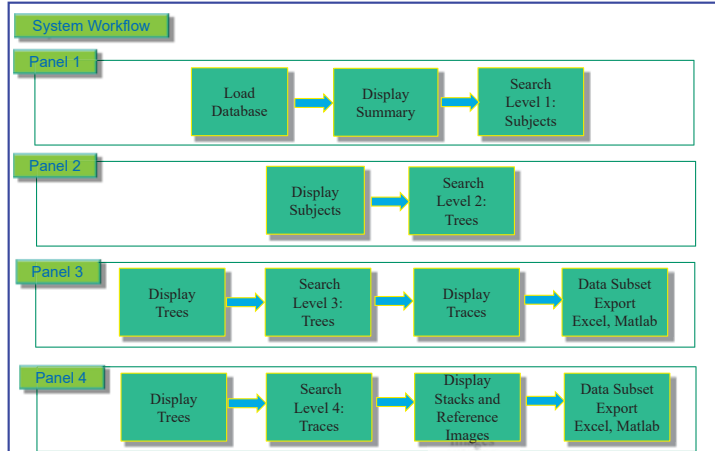
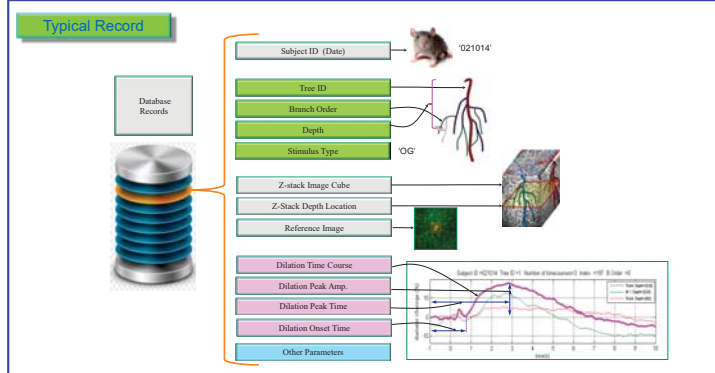
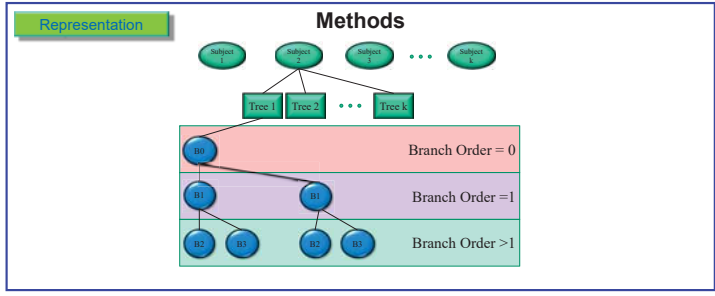
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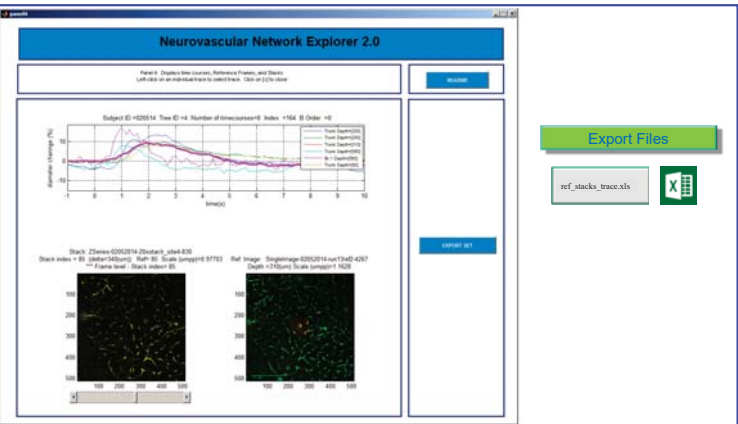
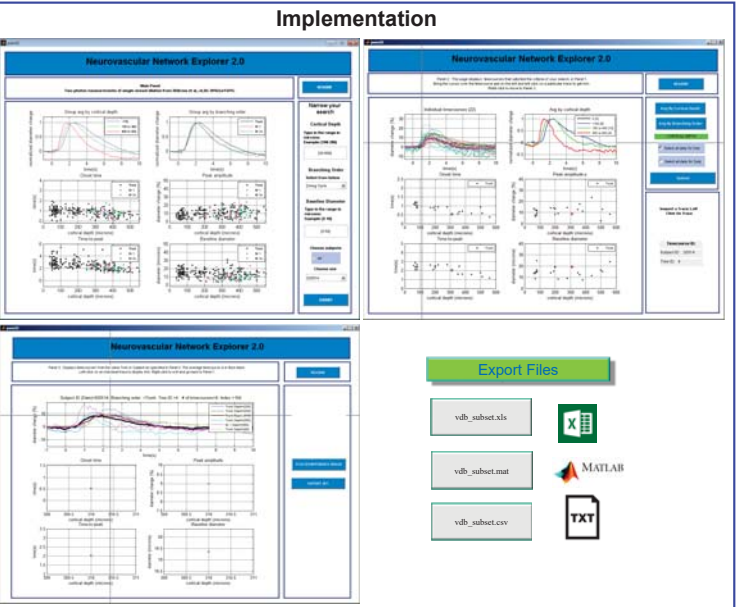


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A NNE was created using MATLAB's application creation architecture.
B. MATLAB Compiler Runtime allows MATLAB based programs without license requirement.



APPLICATIONS and TARGET USES OF NNE2

- Primarily for computation modelers
- Computational 3D vascular structural reconstructions of the microvascular network [1-3]
- Global 3D vascular dynamics analysis
- Re-usable system for databasing of user's own data

1. Gagnon, L., et al, J Neurosci, 2015, 35(8), 2. Sakadzic, S., et al., Nat Commun, 2014, 5, 3. Sakadzic, S., et al., Nat Methods, 2010, 7(9).

Conclusions

- Low-cost and low-complexity solution for sharing of experimental neuroinformatics data
- Close inspection of experimental data allowing standardization of data formats and reuse of data as well as processing and analysis tools
- Access to basic scientific data needed for bottom-up modeling of the vascular/hemodynamic responses, furthering insight into cerebral blood flow regulation and physiological underpinning of functional Magnetic Resonance Imaging (fMRI) signals

Access: <http://nil.ucsd.edu/>