Post-doctoral Position in Sleep and Memory

The Neural Dynamics and Neural Engineering Lab at Virginia Tech has an opening for a post-doctoral position. The research project will involve the investigation of the role of sleep in the consolidation of emotional and procedural memories employing EEG and human intracranial data (both electrocorticography (ECoG) and depth electrode data).

Our lab investigates neural dynamics during active behavior and during off-line states, such as sleep, using a combination of computational modeling, signal processing techniques, and both invasive and non-invasive techniques for recording neural activity. The basic science knowledge gathered from these investigations is leveraged to understand how memories are instantiated in the brain, to gain insight into how learning occurs during brain machine interface (BMI) tasks, to improve BMI algorithms, and to develop the framework for stimulation and pharmacological therapies for diseases, especially those marked by abnormal neural dynamics during sleep (e.g., post-traumatic stress disorder (PTSD) and Parkinson's disease).

Please see the lab website (www.vijayan.neuroscience.vt.edu) for more details.

Candidates should have a Ph.D. in bioengineering, neuroscience, psychology, or a related field. Programming experience (e.g., with Python or Matlab) is desirable. Experience running behavioral experiments or collecting EEG data would be an asset. Interested candidates should send a CV, a statement of research interests, and the contact information for three references to svijayan9@gmail.com.