The Medical Image Analysis Laboratory (MIAL) at Simon Fraser University (SFU) invites applications for a post-doctoral position for a 2-year term starting immediately. This position is dedicated towards multimodal brain MR image analysis in the context of early detection of Alzheimer's and the development of novel computational tools for quantifying longitudinal changes over the course of AD pathology evolution with a focus on the early stages. The project is a three-way collaboration between the MIAL-SFU (Dr. Faisal Beg), the UBC Clinic for Alzheimer Disease and Related Disorders (UBC-CARD, Drs. Robin Hsiung, Claudia Jacova) and the Neuroimaging and Applied Computational Anatomy Lab, Northwestern University (Dr. Lei Wang). Through designing novel features for representation of cross-sectional and longitudinal brain MR image data (structural, functional, DTI, PET etc.) and designing novel statistical classification algorithms, the candidate will extend the state-or-art in MR image-based biomarkers for the early detection of Alzheimer's disease and those that can be used for tracking longitudinal changes over time. The candidate will also work towards a computational 'bridge' between the computing environments at SFU and the clinical environment at UBC-CARD where tools developed and used in this research can be applied in a clinical setting via a distributed but seamless environment respecting data security and confidentiality.

Qualifications:
- A PhD degree in Engineering, Computer Science or Neuroscience (with focus on brain MR image analysis)
- Strong programming and quantitative analysis skills.
- Background in machine learning, pattern recognition, statistical learning and statistical analysis are highly desirable.
- Prior experience in neuroimaging and in particular, evidence of analysis of the ADNI database in the past will be extremely relevant.
- The candidate must be highly motivated and capable of working independently.
- The candidate is required to have excellent communications skills in English and be a team player.
- Proven expertise at writing high quality journal articles is required.
- Exceptional Master's level graduates will also be given consideration.

The position includes a competitive salary commensurate with expertise and experience.

Please send a cover letter and a full CV to Mirza Faisal Beg, Associate Professor, School of Engineering Science, Simon Fraser University via email (mfbeg@sfu.ca).