Job Posting

Position:	Neuroimaging Data Analyst
Reports to:	Research Director
Position type:	Temporary Full-Time (3–6-month contract)
Location:	Toronto, Canada

ABOUT THORNHILL MEDICAL:

Thornhill Medical's ground-breaking products are designed to be used globally by emergency health care providers, humanitarian, and military medical teams. Thornhill's oxygen-focused research and applications are transforming patient care in extreme circumstances, while inspiring and enabling other new technologies to unlock vital life-saving solutions. Thornhill Medical's innovations are in 19+ countries including Ukraine. With a team committed to courage, collaboration and saving lives, Thornhill Medical leads the way in the nimble and precision-focused field of medical technologies.

POSITION SUMMARY:

The **Neuroimaging Data Analyst** is responsible for working with the clinical Research team in the exploration and development of new and existing clinical applications related to brain function and disorders. The position processes, analyzes and interprets functional and structural brain magnetic resonance imaging (MRI) data and writes programs and/or scripts to aid in data analysis and maintenance.

DUTIES & RESPONSIBILITIES:

- Assists with the collection and management of subject data collection in an MRI environment.
- Analyzes quantitative MRI data.
- Assists with database maintenance.
- Works closely with lead neuroscientists, clinicians, and other researchers to interpret results and apply findings effectively.
- Assists with clinical data evaluation for regulatory applications (FDA/HC/CE)
- Applies appropriate MRI image analysis parameters, integrating datasets, and executing analysis workflows.
- Performs quality checks on imaging datasets and workflow outputs.
- Documents errors in image processing, maintaining detailed records of data workflows, and preparing reports on findings.
- Writes scripts for data analysis, maintenance, and workflow automation.
- Aggregates, curates, performs quality assurance, and analyzes MRI data (BOLD, DTI, structural).
- Considers quality in all aspects of the job and respects procedures and norms.
- Other duties as assigned.

EDUCATION & EXPERIENCE:

- Master's degree or PhD in computer science, neuroscience, or biomedical engineering with specialization in brain fMRI analysis, or equivalent.
- Minimum of 3-5 years of experience in biomedical image analysis.
- Experience in quantitative research, including conducting basic MRI data analyses using common imaging processing software such as AFNI, FSL and/or MATLAB and SPM.
- Experience with program evaluation and data management are assets.
- Experience using research databases and reference management software is an asset.

SKILLS & KNOWLEDGE:

- Ability to work independently on a range of complex tasks, which may include unique situations.
- Knowledge and experience working with functional MRI (fMRI) data
- Strong analytical skills and a solid understanding of neuroscience.
- Proficiency in programming languages like Python, MATLAB, or R.
- Experience with neuroimaging software (e.g., FSL, SPM, AFNI).
- Excellent organizational skills and attention to detail.
- Strong communication skills (verbal and written).
- Strong collaboration skills and ability to work with others to meet shared objectives.
- Familiarity with biostatistics and research methodologies is beneficial.
- Strong computer skills and proficiency with Microsoft Office suite products (Word, Excel, PowerPoint).

OTHER REQUIREMENTS:

- Primarily office related requirements with exposure to production work rooms, research laboratories and customer sites (Hospitals and Research facilities) when required.
- Lifting (up to 50 lbs) and bending.
- Some travel may be required.

Thornhill Medical welcomes and encourages applications from all qualified people, including those with disabilities. Accommodations are available on request for candidates taking part in all aspects of the selection process.

We thank all applicants for their interest, however, only those selected will be invited for an interview.