STAFF ENGINEER

Required Qualifications:

- Degree in Electrical Engineering (EE) or related science degree with electronics emphasis.
  - Associate’s degree and 6 years relevant work experience, or
  - Bachelor’s degree and 4 years relevant work experience, or
  - Master's degree and 2 years relevant work experience.
- Experience with RF electronics theory and practical application.
- Hands-on proficiency soldering, constructing hardware, and troubleshooting electrical circuits and systems.
- Experience with lab test equipment such as oscilloscopes, RF power meters, network analyzers, noise figure meters, etc.

Preferred Qualifications:

- RF front end component design, construction, testing and evaluation and research application support for MRI and NMR biomedical research and clinical diagnostics. These components include RF coils, RF power amplifiers, RF preamplifiers, RF transmit-receive switches, and RF filters, RF power supplies and RF signal, power, and control interfaces. The ideal applicant understands the function and design of RF circuits, RF electronics, antennas and their application in the design of MR coil arrays for magnetic resonance imaging.
- Experience in RF circuit design including RF circuit modeling, PCB design, prototyping, and testing.
- Proficient with EM simulation software such as CST, XFdt, SEMCAD, HFSS.

Responsibilities:

- Producing fully tested RF circuits and integrate them into MRI compatible housings.
- Particular focus will be the layout and design of optimized RF transmit and receive array coil technology and EM modeling.
- Managing and maintaining a neat and orderly workspace, producing RF coils for MRI and NMR field strengths of 3T to 10.5 T whole body human imaging, and for animal systems at 9.4T and 16.4T.
- Assist with regular magnet maintenance and regular helium and nitrogen fills.
- Working to support the MR hardware needs of researchers at the CMRR.

The University of Minnesota offers a comprehensive benefits package including:
- Competitive wages, paid holidays, vacation and sick leave
- Low cost medical, dental, and pharmacy plans
- Health care and dependent daycare flexible spending accounts
- Excellent retirement plans with employer match
- Disability and employer paid life insurance
- Wellbeing program with reduced insurance premiums
- Tuition reimbursement opportunities covering 75%-100% of eligible tuition
- Student loan forgiveness opportunity
- Opportunities for growth and promotion

How To Apply

https://hr.myu.umn.edu/jobs/ext/329699
Applications must be submitted online.

For detailed questions please e-mail: adria001@umn.edu