

Job opening: R&D Engineer – FEM, Ultrasonic Guided Wave, NDE

Job Description

X-wave Innovations, Inc. (XII) is a Research and Development (R&D) firm headquartered in Gaithersburg, Maryland. We conduct state-of-the-art research and product development in the fast evolving areas of Sensor Technology, Ultrasound, Nondestructive Evaluation/Structural Health Monitoring, Signal/Image Processing and Automation Systems. We are looking for a highly self-motivated R&D Engineer with strong interest and track record in R&D of ultrasonic guided wave based NDE/SHM to join our team. Good writing/communication skills are expected, as well as excellent work ethics and attention to detail. **US citizen or Permanent Resident is preferred.**

- M.S. or higher in ME, EE, or related field with 5+ years of hand-on experience in ultrasonic guided wave based NDE and SHM system design & development
- Proficiency with FEM simulation and modeling of ultrasonic guided wave propagation in structures
- Experience in signal/image processing, data analysis
- Proficiency in experiment, including instrument interfacing and system integration
- Experience in signal/image processing, data analysis
- Experience in wireless sensor network and communication protocol a big plus
- Experience in ultrasonic generator/receiver and transducer design & development a big plus
- Track record of R&D, including publications
- Experience in a small R&D organization is desired. We are looking for a *self starter and proactive person* to work and contribute on the exciting technologies we are creating

Job Duties

- Conduct R&D in ultrasonic NDE and SHM systems/technologies
- Develop prototype hardware and software from concepts
- Test and improve prototype hardware and software
- Write research proposals and technical reports

Education

M.S. or Ph.D. EE, Physics, or related field

We offer competitive salary along with a full benefit package (e.g., medical/dental/vision insurance, 401K, profit-sharing, paid holidays, vacation, etc.). XII is an EEO/AA employer.