Finite Element Analysis Developer

Convergent Manufacturing Technologies (www.convergent.ca), a small but growing university spin-off company located on the UBC Vancouver campus, is a world-leader in virtual manufacturing for the aerospace industry with the majority of customers outside Canada. We develop specialized engineering simulation software and provide engineering support to the leading aerospace companies world-wide.

Position Overview:

Convergent is in a growth phase and is seeking a full-time Finite Element Analysis Developer. This position will be reporting directly to the Lead Engineer, Development#. The successful candidate will be a dynamic, self-motivated, computer-savvy individual who will provide programming support for all of our existing software products as well as design and implementation of future products.

Convergent's software offerings range from desktop engineering applications, to real-time data acquisition and management systems, to plug-ins and modules for finite element analysis packages. Most development at Convergent uses Python, but significant development in C, C++, and FORTRAN also occurs.

Convergent's software products will be expanding to include new capabilities in our finite element analysis (FEA) related products. The successful candidate will assist both the Analysis and Development teams in creating solutions appropriate for the needs of several new projects. The successful candidate will have a mathematical understanding of the fundamentals of finite element analysis, and FORTRAN programming experience with a focus on numerical analysis and finite element analysis.

Key Responsibilities include but not limited to the following:

- Design, code, test, and document applications, utilities, firmware, etc., as required for internal and customer projects
- Review, debug, refactor existing applications, utilities, firmware, etc.
- Provide internal and customer support for applications, utilities, firmware, etc.

Qualifications:

- Experience – Demonstrated programming and analysis skills related to finite element analysis software.
- Education – Graduate degree or equivalent work experience related to computer science, numerical analysis, or finite element analysis. An understanding of finite element fundamentals is essential.
- Computer Skills – Comfortable working in Windows and Linux environments, experience with ABAQUS, ANSYS, Nastran, Marc, Dyna, or similar FE software.
- Programming Skills – Demonstrated experience with FORTRAN, familiarity with Python would be an asset
- Organizational/Multi-Task Skills – An independent self-starter; able to allocate one's time effectively; detail oriented; efficient and organized; works well under pressure,
- Relationship Skills – A team player with an outgoing personality.
- Preference will be given to candidates who qualify for the NSERC IRDF program.

Convergent offers a competitive salary, a medical benefit package and can offer flexible working hours.

Please note that some of the work is subject to the Controlled Goods Program (http://ssi-iss.tpsgc-pwgsc.gc.ca/dmc-cgd/publications/presentations/srvl-ovrvw-eng.html#q). Prior to receiving an offer of employment, you must consent to a security assessment which includes a criminal background check.

If you are interested and qualified in this position, please submit your cover letter and resume to careers@convergent.ca **Please quote job number 20120626 in the subject of your email.** While all submissions will be assessed only suitable candidates will be contacted.