Research Fellow (3D Additive Manufacturing Team)

Job Description
The Singapore Institute of Manufacturing Technology (SIMTech) develops high value manufacturing technology and human capital to enhance the competitiveness of Singapore's manufacturing industry. It is a research institute of the Agency for Science, Technology and Research (A*STAR).

SIMTech (A*STAR Research Entities) is looking for a motivated, innovative quick learner with excellent interpersonal skills to join the 3D Additive Manufacturing Team in the Forming Technology Group (FTG). The successful candidate has opportunities to participate in research project related to metal powder-bed additive manufacturing.

This includes the following areas (but not strictly limited to):
• Understanding and optimizing processing parameters for powder-bed additive manufacturing (in particular binderjet printing technology) of metal alloys.
• Establishing fundamental understanding/verification of mechanisms for the processing-structure-property relationship of metal alloys by binderjet printing technology.
• Developing binderjet printing process methodologies and binderjet printing system (e.g. hardware modifications) for specific application requirements.
• Developing suitable binder systems.
• Operating state-of-the-art equipment for R&D projects.
• Writing of technical reports and presentation of technical results.
Job Description:
SIMTech is looking for a motivated, innovative quick learner with excellent interpersonal skills to join the Foundry operation in Emerging Application Division.

The successful candidate will be responsible for the development of mass scalable manufacturing processes for microfluidic devices.

The job scope includes:
- Developing of manufacturing processes related to microfluidic manufacturing particularly the mold insert fabrication & molding process for micro molding of microfluidic devices.
- Operation and maintenance of lab equipment in the cleanroom environment.
- Documentation for ISO 13485 including process instructions and validations
- Lead prototyping build for both in-house and industry projects

Job Requirements:
- Bachelor & above in Engineering/Science or equivalent
- 3 - 6 years’ working experience in related field
- Knowledge in mold fabrication & electroforming
- Ability to communicate and work effectively in a team

Scientist (Manufacturing Execution and Control), SIMTech

Job Description:
SIMTech, A*STAR is looking for a motivated, innovative quick learner with excellent interpersonal skills to join the Manufacturing Execution in the Manufacturing Execution and Control (MEC). This includes the following areas (but not strictly limited to):

- Real time sensor streaming data acquisition, transition, pre-processing from various type of machines
- Hardware and software communication, IIoT Connection among machines
- Machine learning and data mining for process and quality control
- Optimization of manufacturing operation for shopfloor Ind 4.0

Job Requirements:
- PhD in Computer Science / Engineering
- At least 3 years’ experience in industrial experiences on R&D in manufacturing
- Has experience in manufacturing shopfloor
- Has leadership experience
- Knowledge on real time data acquisition, machine connectivity, machine learning and process optimal control

Research Engineer (Manufacturing System) – SIMTech
Job Description:

SIMTech is looking for a motivated, innovative quick learner with excellent interpersonal skills to join the Manufacturing System Analyses (MSA). The scope of work includes:

- To understand customer requirements and propose solution with feasible scope and effort
- Software development and testing
- System implementation and deployment
- Customer technical support and trouble shooting
- Documentation

Job Requirements:

- A Bachelor’s degree or a Master’s degree in Computer Engineering or equivalent
- 2 years of working experience in the related field is required for this position
- Good technical background with hands-on experience in software development and web technologies
- Experience on project management and programming in python C#, .Net, or Java
- Excellent verbal and written communication skills and strong interpersonal skills
- Well organized, meticulous and able to work effectively and independently in a team

The above eligibility criteria are not exhaustive. A*STAR may include additional selection criteria based on its prevailing recruitment policies. These policies may be amended from time to time without notice. We regret that only shortlisted candidates will be notified.

Email your resume stating the relevant Job Title in the Subject Header to: aliceoh@SIMTech.a-star.edu.sg by 30 September 2019.