Student job / HiWi

DEM simulation of powders

Description:

Powders and particles have a wide range of application in different fields such as pharmaceuticals, food, cosmetics, chemicals, metallurgy, mining, mechanical engineering and so on. In particular dealing with dry cohesive particles can be challenging. For instance, there are well-known flow problems in this kind of powders such as channelling, bridging and etc. This work concentrate on dry cohesive particles. The work starts from literature review and goes on to numerical implementation. For the simulation part, we use Discrete Element Method via the open source software LIGGGHTS.

Requirements:

- Background in mechanical engineering, material engineering, chemical engineering and the other related fields.
- Experience in programming language in particular C++ and python.
- Experience in DEM especially using LIGGGHTS/LAMMPS is an advantage.
- Self-motivated person and be able to work independently.

If you are interested, kindly send your C.V. and transcript to my email.

Contact information:

Mohammad Farahani
Email: farahani@ies.uni-stuttgart.de

Institut für Energiespeicherung, Pfaffenwaldring 31 (4. OG), 70569 Stuttgart