Dienerstrasse 15 Zürich 8004 Switzerland

October 18, 2016

Stephanie Frequente CSCS Human Resources via Trevano 131 6900 Lugano Switzerland

Dear Ms. Frequente,

I am writing to apply for the position of Scientific Software Developer.

I believe that I am a strong candidate as I have broad experience in computational mathematics and computational science; I have a PhD in applied/computational mathematics, have worked extensively with both library and application codes as part of my current job as a postdoc on a PASC project, am a native English speaker, and have experience using CSCS's systems.

I am very interested in the collaborative aspect of this position, and would hope to be paired with teams working on topics I have touched on before, such as geophysics, communication-hiding algorithms, or numerical methods. In particular, I would be excited to work with a team leveraging the PETSc library, to which I am eager to contribute as a developer.

To me, "Modern C++" means a set of tools which are often fun, occasionally elegant, and usually overkill. Especially in scientific computing, much of what we need to do can (and is) accomplished in C or Fortran, so my personal preference with C++ is to favor less-elaborate designs which are more easily comprehended, debugged, profiled, and transferred to new developers. Extremely clever inheritance trees, template metaprogramming, etc., should not be introduced without very clear justification.

Sincerely,

Patrick Sanan