Applied Physics Laboratory

October 26, 2019

Johns Hopkins University Job ID: 20770

Dear Team Hiring Manager,

As a budding physicist, I am interested in joining your team as a Computational Physicist/Engineer to contribute toward our nation's security. I would like to apply for position ID 20770.

I am currently a post-doctoral researcher at the University of California, Berkeley with expertise in computational physics simulations and large-scale data analysis working in the field of particle/nuclear physics.

With regard to my ability to meet specific requirements of this job:

- Education: PhD in experimental particle physics (2016) with emphasis on computational physics modeling/simulations, data analysis, and algorithm development for novel particle detection technologies.
- Experience in computational physics: 8 years of experience working with GEANT4 modeling particle/radiation transport, nuclear decays, photon propagation, and their effects on real hardware. Post-doctoral work involves mechanical stress/thermal simulations using SolidWorks/ComSol.
- Scientific/engineering programming experience: Over 9 years of experience with C/C++/ROOT, 4 years of experience with Python and FORTRAN working on data analysis and algorithm development for physics experiments.
- Can work independently as well as collaboratively: Worked with 3 multi-national collaborations of physicists and engineers in Japan, Italy, and US. Contributed independent original work to specific area of research within collaborations.
- Oral and written communication skills: Contributed work published in various journals. Talks given at institutions such as Lawrence Livermore National Laboratory, Sanford Underground Research Facility, Fermilab, Argonne National Laboratory. Mentored PhD-level students at UC Berkeley/UCLA and increased productivity by organizing group initiatives.
- Willing and able to travel and attend meetings: Yes.
- Comfortable working in closed areas: Yes.
- Ability to obtain a secret level security clearance: US citizen.

I would appreciate an opportunity to meet and discuss my application at an interview. I have also sent my resume for your consideration. Please feel free to let me know if you have any questions.

Thank you for your time,

Michinari Sakai