Applied Physics Laboratory

November 23, 2019

Johns Hopkins University Job ID: 22143

Dear Team Hiring Manager,

I am interested in joining your team as a Weapon System Applied Physicist to contribute toward modeling and evaluating the performance of intercontinental ballistic missiles. I would like to apply for position ID 22143.

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 physics (2016) with emphasis on computational physics modeling/simulations, data analysis, and algorithm development.
- Skill in statistical estimation and physics-based modeling: Over 8 years of experience analyzing large-scale simulated/real data using statistical analysis tools in ROOT/Python. Typical work involves uncertainty analysis, trade studies, sensitivity studies.
- **Skill in scientific programming:** 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.
- written/oral 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.
- Collaborate effectively with staff, collaborators and sponsors: 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.
- Willing/able to travel: Yes.
- Able to obtain interim Secret level security clearance by start date, and ultimately obtain final Top Secret level clearance: Yes.

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