

Dear Team Hiring Manager,

As a motivated physicist, I am interested in joining your Remote Sensing & Analysis Team of the Oceanic, Atmospheric and Remote Sensing Sciences Group to apply my skills to answer current and future problems of national importance. I would like to apply for position ID 20190.

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

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

- **Education:** PhD in experimental particle physics (2016) with emphasis on remote particle source detection, particle/radiation transport simulations, and algorithm development for novel particle detection technologies.
- **Experience in remote sensing, signal processing, and data analysis:** Graduate work involved remote detection searches of accumulated dark matter and neutrino beams through scintillation detectors. Processed raw voltage signals from photo-sensors to implement new event topology reconstruction techniques. 8 years of experience analyzing large-scale simulated/experimental data using statistical analysis tools in ROOT/Python. Typical work involves uncertainty analysis, trade studies, sensitivity studies.
- **Computer programming skills applicable to scientific analysis:** 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.
- **Able to obtain security clearance:** US citizen.
- **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.

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**

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