Chiba University Seeking a Specially Appointed Researcher at the Center for Environmental Remote Sensing

June 1, 2021

Environmental Prediction Science, Kotsuki Laboratory Center for Environmental Remote Sensing (CEReS), Chiba University (https://kotsuki-lab.com/)

[Job Description]

The Center for Environmental Remote Sensing Research Center (CEReS), Chiba University, processes, archives, and publishes satellite data and related ground observation data, and aims to scientifically utilize it through a wide range of research activities on Earth environmental research. At this time, we are recruiting specially appointed researchers to carry out the following research: (1) heavy rain/ flood prediction by meteorological/ hydrological models with data assimilation, (2) high-frequency heavy rain and flood predictions by machine learning with fast computation ability, (3) AI-based reservoir operation

1. Research Field:

Areas of application: Those who can contribute to the Project "real-time heavy rain/ flood prediction in the "Fugaku" era pioneered by cutting-edge data science". Desirable applicants should have a PhD or expected in the near future.

Project: https://kaken.nii.ac.jp/en/grant/KAKENHI-PROJECT-21H04571/

2. Job Contents:

Engaged in research projects such as "Real-time heavy rain/ flood prediction in the "Fugaku" era pioneered by cutting-edge data science" (PI: Shunji Kotsuki), and conducts heavy rain/ flood prediction research. Specifically, the following research work is assumed, but it is also possible to set your research theme that contributes to the project mission, taking into consideration the research background and technology of the applicant.

- (1) Improvement of meteorological and hydrological forecasts by assimilating assimilation and numerical models.
- (2) Emulation of meteorological and hydrological models by machine learning and searching for data-driven disaster prediction methods.
- (3) Searching for new prediction methods that integrate data assimilation, physical

models, machine learning, time series mathematics, etc.

[Qualifications]

Those who are interested in research fields related to meteorological / hydrological models, data assimilation, machine learning, and data science, and have research achievements in related fields. If you have an interest or motivation for such fields mentioned above, please contact us.

[Related Research Fields]

Geoscience (Earth Science) including hydrology and meteorology, general environmental science, mathematics/ general information science. We also welcome interested applications from other related fields.

3. Hire Date: Aug, 2021 **negotiable

4. Recruitment Period:

The contract is until the end of the Japanese school year, but it may be renewed depending on the progress of the work.

5. Employee Benefits:

- (1) Job title: Specially appointed researcher (full-time).
- (2) Salary, etc.: University's Specified Employment Staff Salary Regulations based on your years of experience will be applied
- (3) Working hours: from 8:30 to 17:15, 5 days a week, 7 hours and 45 minutes per day (under the Discretionary Labor System for Professional Work).
- (4) Holidays: Saturdays, Sundays, National holidays, and year-end and New Year holidays.
- (5) Leave: granted based on the University's employment agreement.
- (6) Various allowances: provide commuting allowance if requirements are met based on the regulations.
- (7) **Insurance:** join a mutual aid association, employment insurance, and workers' accident compensation insurance
- 6. Selection Process: will be made based on application screening and interviews.

7. Required documents:

(1) Complete CV: any style or format is accepted. *Email address is required.

- (2) List of research achievements: please list peer-reviewed treatises and others separately.
- (3) Copy of 3 major publications: must be single author or first author treatise.
- (4) Previous research history and your research plan after hired: please fill two letter size paper for <u>each</u> topic.
- (5) Contact information of your former co-workers: list 1 or 2 people other than the Center for Environmental Remote Sensing, Chiba University. Any style or format is accepted.

8. Deadline for this recruitment:

Applications (required documents listed #8) must arrive by June 30, 2021. Please note that the deadline may change accordingly.

9. Documents to be sent to:

Shunji Kotsuki

Environmental Remote Sensing Research Center, Chiba University 1-33 Yayoi-cho, Inage-ku, Chiba-city, Chiba, Japan 263-8522 shunji.kotsuki@chiba-u.jp

Note "Specially Appointed Researcher Application Documents Enclosed" in red on the front of the envelop if sent by registered mail.

10. Contacts:

Job related:

Shunji Kotsuki Environmental Remote Sensing Research Center, Chiba University Phone: 043-290-3861, e-mail: shunji.kotsuki@chiba-u.jp

Benefits related:

Mika Takemura

Center Support Unit., Science and Engineering General Affairs Division, Nishi-Chiba District, Chiba University Phone: 043-290-2024, e-mail: bee3832@office.chiba-u.jp

11. Notes:

- Application documents will not be used for any other purposes than the selection process. These documents will not be returned unless a stamped self-addressed envelope is enclosed.
- Travel expenses will not be paid for interviews during the selection process.