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

March 19, 2022

Center for Environmental Remote Sensing (CEReS), Chiba University

[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 is exploring a wide range of research fields on Earth Environmental Science. At this time, we are recruiting a specially-appointed assistant professor or researcher to implement education/research on global environment and disaster predictions through integration of big satellite observations and data science as following specifications.

1. Number of Applicants: 2

2. Recruitment Field:

Candidates who can contribute to education/research on global environment and disaster predictions through integration of big satellite observations and data science. Doctoral degree at the time of appointment or expected to complete his/her doctorates near future.

3. Job Description:

Engaged in research projects such as "Exploring Frontiers in Global Environment and Disaster Predictions Through Integration of Big Satellite Observations and Data Science" of Strategic Research Acceleration Program of Chiba University. The following research activities are included, yet research themes can be set to contribute to our project mission with the consideration of the applicant's research background and interests/skills.

✓ Data-driven weather and flood forecasts using big satellite data and deep learning
✓ Improving predictions of weather and water-related disasters using data assimilation and numerical atmospheric and hydrological models
✓ Estimating global carbon budget using process-based terrestrial ecosystem models
✓ Advancing hydrological and ecological land models using integrations of satellite data through data assimilation, machine learning, and Gaussian process
✓ Estimating wild fire and biomass loss using satellite data

✓ Quantifying weather controllability and possible damage reductions with ensemble data assimilation and data science techniques such as Koopman mode decomposition, variational auto-encoder and reservoir computing

The Assistant Professor/ Researcher will work at Kotsuki or Ichii Laboratory of CEReS depending on research theme and applicant's background

[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. Applicants from fields other than earth science are also welcome (e.g., mathematics, information science, ecology, etc.) if you have an interest or motivation for such fields mentioned at the beginning.

[Related Research Fields]

Geoscience (Earth Science) including hydrology and meteorology, civil engineering, general environmental science, mathematics, and information science.

4. Hire Date: June, 2022 **negotiable

5. 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.

6. Employee Benefits:
(1) Job title: Specially-appointed assistant professor or 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

7. Selection Process: will be made based on application screening and interviews.

8. 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.

9. Deadline for this recruitment:

Applications (required documents listed #8) must arrive by April 28, 2022. Please note that the deadline may change accordingly.

10. Documents to be sent to:

Shunji Kotsuki and Kazuhito Ichii

Environmental Remote Sensing Research Center, Chiba University

1-33 Yayoi-cho, Inage-ku, Chiba-city, Chiba, Japan 263-8522

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

11. Contacts:

🔻 **Job related:**

Shunji Kotsuki

Environmental Remote Sensing Research Center, Chiba University

Phone: 043-290-3861, e-mail: shunji.kotsuki@chiba-u.jp

Kazuhito Ichii

Environmental Remote Sensing Research Center, Chiba University

Phone: 043-290-3855, e-mail: ichii@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

12. 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.