

JOB VACANCY ANNOUNCEMENT

Senior Research Engineer (ACA Control) at ALMA Project, National Astronomical Observatory of Japan (NAOJ)

NAOJ announces a Senior Research Engineer position at the NAOJ ALMA Project to lead the team which performs the maintenance and development of the Atacama Compact Array control software.

1. Job Title: Senior Research Engineer (ACA Control), one position
2. Division and Location: NAOJ ALMA Project, Mitaka (Japan)
3. Area of Expertise: Software, Radio Astronomy, and Interferometry
4. Job Description:

This position is for a person who is based in Mitaka, at NAOJ Headquarters, and leads the team which performs the maintenance and development of the Atacama Compact Array (ACA a.k.a. Morita Array) control software. The ACA is currently composed of twelve 7m antennas operated as an interferometer, four 12m antennas operated as single-dish telescopes, the ACA correlator which processes the signals coming from all antennas, the ACA spectrometer which processes the data from the single-dish telescopes, and the related electronics and control hardware and software. As the ALMA telescope is upgraded in the coming decade, as part of ALMA2 and to address aging, the antenna and backend electronics including correlators and spectrometer will be modified. The successful candidate will provide the technical expertise and the leadership to deliver the control software that guarantees a transition towards the upgraded system. The person is expected to lead international discussion and collaboration in close coordination with the NAOJ ALMA Project Computing Manager. Their major responsibilities are as follows:

- lead the maintenance and trouble-shooting of ACA control software, including ACA antennas, correlator and spectrometer, and related computers and network equipment;
- lead the development of new control software for the upgrade of the ACA system towards ALMA2030; and
- lead the implementation of the new control software in the transition from the current to the upgraded ALMA systems.

In addition to taking the leading role in ACA control software, the successful candidate is expected to contribute to the management of the ALMA Computing Team and other high-level tasks in the project. The person may become ALMA Computing Manager or take a leadership role in other NAOJ Projects or Centers in the future.

To fulfill these responsibilities, the successful candidate is required to have deep and wide expertise in software development. Good knowledge of radio astronomy and radio interferometry will be considered valuable assets. The person is also required to have good communication skills and good English proficiency to clearly convey Japan's position in discussions at face-to-face meetings, video conferences, and teleconferences while establishing and maintaining good relationship with the Joint ALMA Observatory and North American and European Executive partners. Experience in large international projects is considered key for this position. The person is required to have native communication skills in

Japanese to negotiate with companies in Japan.

5. Terms of Appointment:

The successful candidate should be able to start as soon as reasonably possible after the job offer has been accepted.

The term of the contract will continue up to the end of the Japanese fiscal year in which the Senior Research Engineer reaches NAOJ's mandatory retirement age of 65, including a probation period of six (6) months at the start of the contract.

6. Qualifications:

(1) Minimum Educational Requirement: MSc degree or equivalent in computing science, astronomy or related fields;

(2) Other Requirements:

A) Native communication skills in Japanese to be able to negotiate with companies in Japan

B) Capability to join, discuss and collaborate in English-speaking teams; strong interpersonal communication skills and ability to work in a team with diverse cultural background will be considered important assets for this position.

7. Required Application Materials: (*To be prepared in English. Any other language will not be accepted)

(1) A cover letter;

(2) A curriculum vitae;

(3) Your commitment and plan to fulfill the duties (font size 12pt, max. 5 A4 pages);

(4) A list of publications and conference presentations relevant to this position, including copies of up to 3 contributions;

(5) Copy of any National Certification related to the job contents;

(6) Your address (e-mail and phone) for prompt contact and the email address of your current supervisor or line manager; and

(7) At least three reference letters written in English. Please ask your references to upload the letters directly to the NAOJ job application system shown in 9.1. before the application deadline. Applicants are responsible for ensuring that the letters arrive before the application deadline.

8. Application Deadline: 2023-11-24, 12:00 noon (Japan Standard Time)

9. Application Instructions:

9.1. How to Submit an Application:

Applicants are required to apply via the NAOJ Nextcloud on the web.

(1) Please access the following URL for registration:

<https://forms.office.com/r/BKQaB0w0wi>

(2) After you submit the registration form, you will receive an email showing the URLs for (a) uploading your application documents and (b) your reference letters.

(3) Please ask your references to upload their letters via the URL shown in (2)(b).

(4) Please upload the application documents (from 7. (1) through (6) above) via the URL (2)(a). These files must be in PDF format (max 50 MB each, 100 MB in total, at most 10 files). The file name of application documents should be stated applicants name, applied project and position.

9.2. Contacts:

- If you have any questions related to the job description, contact;
Email: Alvaro.Gonzalez_AT_ao.ac.jp (replace _AT_ with @)
Attention to: Alvaro Gonzalez, NAOJ ALMA Project Manager, NAOJ,
Subject: “Question on JD of Senior Research Engineer (ACA Control) of NAOJ ALMA Project”
- If you have any questions related to other items, contact;
Email: job05-researchengineer_AT_ao.ac.jp (replace _AT_ with @)
Subject: “Question on Senior Research Engineer (ACA Control) of NAOJ ALMA Project”

10. Working Conditions:

(1) Work Type and Work Hours: The Discretionary Labor System for Professional Work shall be applied.(standard work hours: 38.75 hrs/week, from 8:30 to 17:15 with an hour intermission)

(2) Holidays: Saturdays and Sundays, National Holidays, New Year holidays (December 29th-January 3rd), Annual paid leave, Summer holidays, Bereavement leave, etc.

(3) Social Insurance: MEXT Mutual Aid Association (health insurance), Employees' Pension Insurance, Employment Insurance, Industrial Accident Compensation Insurance

(4) Remuneration:

- Salary: Annual salary shall be determined based on professional knowledge, skills, required education, and job experiences as per the NINS regulations (NINS, or the National Institutes of Natural Sciences, is an upper-level organization that manages NAOJ). Payments will be made monthly in 12 equal installments.
- Allowances: Dependent allowance, residential allowance, commutation allowance, and other allowances will be paid to employees who meet the conditions outlined in the NINS regulations. An amount equivalent to the year-end allowance and diligence allowance will be included in the annual salary.
- Salary Increment: Once a year in accordance with the performance review
- Retirement Allowance: Provided
- Travel and relocation: Eligible employees will be provided with a relocation travel package to NAOJ, subject to the travel regulations of NINS (details must be arranged with the administration office).

11. Miscellaneous:

- Interviews may be conducted in person or online. Applicants will be responsible for all costs associated with the interview (transportation, communication, etc.).
- This position is subject to the NINS Employee Regulations. The annual salary schedule indicated in Table (2) of the Research-Education Employee Base Annual Salary shall be applied to this position.
- Policy for Equal Employment Opportunity: Abiding by the Equal Employment Opportunity Act for Men and Women, NAOJ is committed to realizing a society with gender equality. If two candidates are deemed equal in their performance evaluation, NAOJ will take positive action to employ women.
- If you have taken a leave(s) for maternity, childcare, and family care, please indicate it in your curriculum vitae. We will take it into account when assessing your performance. For details, see <https://www2.nao.ac.jp/~open-info/gender-equality/en/>
- Smoking is prohibited on the premises excluding designated outdoor smoking areas.
- Information submitted in your application documents will not be used for any purpose other than the selection process and for contacting you with necessary notices in connection with the selection. Once

the selection process is complete, we will securely dispose of all application documents and personal information except those submitted by the successful candidate.

12. Recruiting Institution:

Inter-University Research Institute Corporation, National Institutes of Natural Sciences (NINS), National Astronomical Observatory of Japan (NAOJ)