

# सीएसआईआर-चौथा पैराडाइम संस्थान

# **CSIR-Fourth Paradigm Institute**

Ministry of Science & Technology, Govt. of India बेलूर कैंपस, विंड टनल रोड, बैंगलोर-३७ Belur Campus, Wind Tunnel Road, Bangalore-37



# WALK-IN INTERVIEW FOR THE ENGAGEMENT OF PROJECT STAFF ON TEMPORARY BASIS

# Advertisement No. 03/2025 Dt: 01-07-2025

Council of Scientific and Industrial Research (CSIR) is an autonomous body under Ministry of Science and Technology, Government of India. It is one of the largest and most diversified scientific organizations having a network of nearly 38 state-of-the-art Laboratories with well experienced scientific staff and a large number of research scholars.

CSIR-Fourth Paradigm Institute (CSIR-4PI), Bengaluru is a premier research institute under the Council of Scientific and Industrial Research (CSIR), which is an Autonomous Body working under the Department of Scientific and Industrial Research, Ministry of Science & Technology, Government of India. The vision of CSIR-4PI is to pursuit "High End Computational Science Empowering Data Intensive Scientific Discovery" in trans-disciplinary areas through large scale scientific computing. Our facilities include world-class supercomputing environment; Cyber Security Research and Observation (CySeRO) test-bed; Broadband Seismic, GNSS & GHG Networks, etc. CSIR-4PI is recognized as a leader at national level and competing at international level for its multi-dimensional high impact studies in earth system covering all the four geographic spheres for over three decades.

Walk-in-Interviews are scheduled to be held on the date as mentioned below for the selection of suitable candidate(s) in the specified areas. The engagement will be purely on temporary basis.



Date of Walk-in Interview : 22.07.2025

**Reporting Time** 

: 09:00 A.M

Venue

: CSIR-4PI, NAL Belur Campus

Wind Tunnel Road, Bengaluru 560037.

Tenure of the Project

: 31st March 2028

Age Limit:

: 35 years

# Emoluments (per month) [Consolidated]:

# Project Associate I (PAT I):

\* Rs.31,000/- per month + House Rent Allowance (HRA) (or) Rs.25.000/- per month + House Rent Allowance (HRA)

- \*(i) Rs. 31000/- P.M + HRA to Scholars who are selected through:
- (a) National Eligibility Tests CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or
- (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.
  - (ii) Rs.25000/- P.M + HRA for others who do not fall under (i) above

# (OR)

# Project Associate II (PAT II):

- \* Rs.35,000/- per month + House Rent Allowance (HRA) Rs.28,000/- per month + House Rent Allowance (HRA)
- \* (i) Rs. 35,000/-+ HRA to scholars who are selected through:
- (a) National Eligibility Tests CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or
- (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.
- (ii) Rs. 28,000/- + HRA for others who do not fall under (i) above

# Project Assistant II (PA II):

Rs.20.000/- P.M + House Rent Allowance (HRA)

# I. Project Associate I or II (PAT I or II)

# **POST CODE: PAT/03/2025/01: (02 Positions)**

**Essential Qualification for PAT-I:** B.E./B.Tech./M.Sc. or equivalent from a recognized university in Areas mentioned below:

- Computer Science & Engineering / Equivalent
- Artificial Intelligence
- Machine Learning
- Data Science
- Information Technology / Equivalent
- Electronics & Communication Engineering

# (OR)

Essential Qualification for PAT-II: B.E./B.Tech./M.Sc. in Areas mentioned below + 2 Years experience in R&D in Industrial and Academic institutions (OR) S&T Organizations & Scientific Activities and Services (OR) M.E./M.Tech / Integrated M.Tech. in Areas mentioned below:

- Computer Science & Engineering / Equivalent
- Artificial Intelligence
- Machine Learning
- Data Science
- Information Technology / Equivalent
- Electronics & Communication Engineering

#### **Desirable Requirements:**

- Strong Programming skills (Python) and mathematics (ML/DL related)
- Knowledge & Proficiency in ML Libraries (Pytorch, Tensorflow etc)
- Knowledge of different Explainable AI (XAI) techniques (e.g., SHAP, LIME, counterfactuals, saliency maps etc.)
- Medical Image Analysis
- Gate qualified
- MS (by Research)/BS & MS (Dual Degree).

#### **Job Description:**

- Conduct research and develop AI algorithms.
- Writing reports, presentations, documentation, research articles.
- Any other project work assigned.

# **POST CODE:** PAT /03/2025/02: (03 Positions)

**Essential Qualification for PAT-I:** B.E./B.Tech./M.Sc. or equivalent from a recognized university in Areas mentioned below:

- Computer Science and Engineering
- Information Technology
- Artificial Intelligence
- Machine Learning

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- Data Science
- Statistics
- Electrical Engineering
- Electronics and Communication Engineering
- Electronics and Instrumentation Engineering
- Software engineering
- Computer Science and Business System
- Information Systems
- Computational Linguistics

(OR)

Essential Qualification for PAT-II: B.E./B.Tech./M.Sc. in Areas mentioned below + 2 Years experience in R&D in Industrial and Academic institutions (OR) S&T Organizations & Scientific Activities and Services (OR) M.E./M.Tech / Integrated M.Tech. in Areas mentioned below:

- Computer Science and Engineering
- Information Technology
- Artificial Intelligence
- Machine Learning
- Data Science
- Statistics
- Electrical Engineering
- Electronics and Communication Engineering
- Electronics and Instrumentation Engineering
- Software engineering
- Computer Science and Business System
- Information Systems
- Computational Linguistics

**Desirable Requirements:** Good knowledge of programming and mathematics (ML related). Experience with Python and ML (libraries such as pytorch, tensorflow, etc.). GATE qualified/CSIR-UGC NET incl. lectureship/assistant professor. MS (by Research)/BS & MS (Dual Degree).

**Job Description:** Conduct research and develop ML algorithms. Collect, analyze and preprocess data for training and evaluation purposes. Collaborate with team members to integrate solutions into existing systems. Document research findings.

# POST CODE: PAT /03/2025/03: (01 Position)

Essential Qualification for PAT-I: B.E./B.Tech./M.Sc. or equivalent from a recognized university in Areas mentioned below:

- Computer Science and Engineering
- Information Technology
- Artificial Intelligence
- Machine Learning
- Data Science
- Statistics

- Electrical Engineering
- Electronics and Communication Engineering
- Electronics and Instrumentation Engineering
- software engineering
- Computer Science and Business System
- Information Systems

(OR)

**Essential Qualification for PAT-II:** B.E./B.Tech./M.Sc. in Areas mentioned below + 2 Years experience in R&D in Industrial and Academic institutions (OR) S&T Organizations & Scientific Activities and Services (OR) M.E./M.Tech / Integrated M.Tech. in Areas mentioned below:

- Computer Science and Engineering
- Information Technology
- Artificial Intelligence
- Machine Learning
- Data Science
- Statistics
- Electrical Engineering
- Electronics and Communication Engineering
- Electronics and Instrumentation Engineering
- software engineering
- Computer Science and Business System
- Information Systems

**Desirable Requirements**: Experience with sensors and single board computers to build real-time systems. Knowledge of embedded programming. Good knowledge of programming and mathematics (ML related). Experience with Python and ML (libraries such as pytorch, tensorflow, etc.) GATE qualified/CSIR-UGC NET incl. lectureship/assistant professor. MS (by Research)/BS & MS (Dual Degree).

**Job Description**: Conduct research and develop real-time systems. Integrate ML modules with holistic architecture. Collaborate with team members to integrate solutions into existing systems. Document research findings.

#### **POST CODE: PAT /03/2025/04: (01 Position)**

**Essential Qualification for PAT-I:** B.E./B.Tech./M.Sc. or equivalent from a recognized university in Areas mentioned below:

- Robotics/Mechatronics
- Mechanical Engineering
- Material Sciences
- Computer Science
- Computer Engineering / Computer Science & Engineering
- Electronics and Communication Engineering
- Electronics Engineering
- Bio-Technology

(OR)

Essential Qualification for PAT-II: B.E./B.Tech./M.Sc. in Areas mentioned below + 2

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Years experience in R&D in Industrial and Academic institutions (OR) S&T Organizations & Scientific Activities and Services (OR) M.E./M.Tech / Integrated M.Tech. in Areas mentioned below:

- Robotics/Mechatronics
- Mechanical Engineering
- Material Sciences
- Computer Science
- Computer Engineering / Computer Science & Engineering
- Electronics and Communication Engineering
- Electronics Engineering
- Bio-Technology

# **Desirable Requirements:**

- Knowledge of mechanical design softwares like Solidwork/Catia and integration of soft materials with electronics
- Experience with silicone and epoxy casting/molding for sensor fabrication
- Familiarity with soft robotics and tactile sensing principles
- Basic Programming skills (Python)
- CSIR-UGC NET incl. lectureship/assistant professor/GATE qualified.
- MS (by Research)/BS & MS (Dual Degree)

# Job Description:

- Design, 3D print moulds, silicone casting, sensor setup, calibration, vision based sensing, data collection, training ML models.
- Field work (if needed)
- Writing reports, presentations, documentation, research articles.
- Any other project work assigned.

#### POST CODE: PAT /03/2025/05: (01 Position)

Essential Qualification for PAT-I: B.E./B.Tech./M.Sc. or equivalent from a recognized university in Areas mentioned below:

- Computer Science and Engineering
- Information Technology
- Artificial Intelligence
- Machine Learning
- Data Science
- Statistics
- Electrical Engineering
- Electronics and Communication Engineering
- Electronics and Instrumentation Engineering
- Software engineering
- Computer Science and Business System
- Information Systems

(OR)

Essential Qualification for PAT-II: B.E./B.Tech./M.Sc. in Areas mentioned below + 2

Years experience in R&D in Industrial and Academic institutions (OR) S&T Organizations & Scientific Activities and Services (OR) M.E./M.Tech / Integrated M.Tech. in Areas mentioned below:

- Computer Science and Engineering
- Information Technology
- Artificial Intelligence
- Machine Learning
- Data Science
- Statistics
- Electrical Engineering
- Electronics and Communication Engineering
- Electronics and Instrumentation Engineering
- Software engineering
- Computer Science and Business System
- Information Systems

**Desirable Requirements:** Good knowledge of programming and mathematics (ML related). Experience with Python and ML (libraries such as pytorch, tensorflow, etc.) Proficient in reading research papers. GATE qualified/CSIR-UGC NET incl. lectureship/assistant professor. MS (by Research)/BS & MS (Dual Degree).

**Job Description:** Conduct research and develop ML algorithms. Collect, analyze and preprocess data for training and evaluation purposes. Collaborate with team members to integrate solutions into existing systems. Document research findings.

# POST CODE: PAT /03/2025/06: (01 Position)

**Essential Qualification for PAT-I:** B.E./B.Tech./M.Sc. or equivalent from a recognized university in Areas mentioned below:

- Computer Science & Engineering / equivalent
- Artificial Intelligence
- Machine Learning
- Data Science
- Information Technology / equivalent
- Electronics & Communication Engineering / equivalent

#### (OR)

Essential Qualification for PAT-II: B.E./B.Tech./M.Sc. in Areas mentioned below + 2 Years experience in R&D in Industrial and Academic institutions (OR) S&T Organizations & Scientific Activities and Services (OR) M.E./M.Tech / Integrated M.Tech. in Areas mentioned below:

- Computer Science & Engineering / equivalent
- Artificial Intelligence
- Machine Learning
- Data Science
- Information Technology / equivalent

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• Electronics & Communication Engineering / equivalent

# **Desirable Requirements:**

- Strong Programming skills (Python) and mathematics (ML/DL related)
- Understanding /Proficiency in ML Libraries (Pytorch, Tensorflow etc)
- Good knowledge in statistics
- Gate qualified
- MS (by Research)/BS & MS (Dual Degree).

# Job Description:

- Conduct research and develop AI algorithms.
- Writing reports, presentations, documentation, research articles.
- Any other project work assigned.

# **POST CODE: PAT/03/2025/07: (02 Positions)**

**Essential Qualification for PAT-I:** B.E./B.Tech./M.Sc. or equivalent from a recognized university in Areas mentioned below:

- Robotics/Mechatronics
- Computer Science
- Computer Engineering / Computer Science & Engineering
- Electronics and Communication Engineering
- Electronics Engineering
- Artificial Intelligence
- Machine Learning
- Data Science
- Mechanical Engineering
- Information Technology / Information Systems

#### (OR)

Essential Qualification for PAT-II: B.E./B.Tech./M.Sc. in Areas mentioned below + 2 Years experience in R&D in Industrial and Academic institutions (OR) S&T Organizations & Scientific Activities and Services (OR) M.E./M.Tech / Integrated M.Tech. in Areas mentioned below:

- Robotics/Mechatronics
- Computer Science
- Computer Engineering / Computer Science & Engineering
- Electronics and Communication Engineering
- Electronics Engineering
- Artificial Intelligence
- Machine Learning
- Data Science
- Mechanical Engineering
- Information Technology / Information Systems

# Desirable Requirements:

- Strong Programming skills (Python)
- Understanding /Proficiency in ML Libraries (Pytorch),

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- Hands-on experience with various sensor based data sources such as LIDAR, Camera, Stereo etc. on Autonomous Vehicles/ADAS
- Familiarity with Reinforcement Learning and Computer Vision techniques
- Knowledge of simulators like CARLA.
- Experience in setting/Analysis of experiments for ML/RL.
- Familiarity with version control (Git),
- Desirable to have at least one peer-reviewed publication in AI/ML/CV/NLP.
- CSIR-UGC NET incl. lectureship/assistant professor/GATE qualified.
- MS (by Research)/BS & MS (Dual Degree).

# Job Description:

- Run experiments in RL Simulators, Real vehicle, Benchmarking, Dataset Generation.
- Field work for data collection on Autonomous vehicle platforms.
- Writing reports, presentations, documentation, research articles.
- Any other project work assigned.

# **POST CODE: PAT /03/2025/08: (03 Positions)**

**Essential Qualification for PAT-I:** B.E./B.Tech./M.Sc. or equivalent from a recognized university in Areas mentioned below:

- Computer Science
- Computer Engineering / Computer Science & Engineering
- Electronics and Communication Engineering
- Electronics Engineering
- Artificial Intelligence
- Machine Learning
- Data Science
- Robotics/Mechatronics
- Software Engineering
- ComputationalBiology/Linguistics/Physics/BioinformaticsNeuroscience
- Sciences/Mathematics
- Applied & Computational Math
- Information Technology / Information Systems

#### (OR)

Essential Qualification for PAT-II: B.E./B.Tech./M.Sc. in Areas mentioned below + 2 Years experience in R&D in Industrial and Academic institutions (OR) S&T Organizations & Scientific Activities and Services (OR) M.E./M.Tech / Integrated M.Tech. in Areas mentioned below:

- Computer Science
- Computer Engineering / Computer Science & Engineering
- Electronics and Communication Engineering
- Electronics Engineering
- Artificial Intelligence
- Machine Learning

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- Data Science
- Robotics/Mechatronics
- Software Engineering
- ComputationalBiology/Linguistics/Physics/BioinformaticsNeuroscience/ Sciences/Mathematics
- Applied & Computational Math
- Information Technology / Information Systems

# Desirable Requirements:

- Strong Programming skills (Python)
- Understanding /Proficiency in ML Libraries (Pytorch),
- Experience in setting/Analysis of experiments for ML.
- Familiarity with version control (Git),
- Desirable to have at least one peer-reviewed publication in AI/ML/CV/NLP.
- Working knowledge of large language models.
- Past experience in collaborative team work.
- Desirable to have end to end LLM training workflow expertise.
- CSIR-UGC NET incl. lectureship/assistant professor/GATE qualified.
- MS (by Research)/BS & MS (Dual Degree).

# Job Description:

- Run experiments in fine-tuning VLMs, Benchmarking, Dataset Generation.
- Writing reports, presentations, documentation, research articles.
- Any other project work assigned.

#### II. Project Assistant II (PA II)

#### **POST CODE: PA II/03/2025/09: (01 Position)**

Essential Qualification: B.sc./3 years Diploma in Engineering/Technology.

**Desirable Requirements:** Completed **Sign Language Certification course**. Proficient in handling basic applications in computers, knowledge of computer programming language.

Job Description: Collect, analyze and preprocess data. Project documentation.

#### **General Instructions:**

- 1. Candidates reporting for interview after the scheduled time will not be entertained
- 2. The number of positions as advertised may vary depending upon the suitability of candidates and assessed needs of the candidates in the project.
- 3. Eligible candidates may appear for Walk-in-interview(s) on the date, time and place mentioned above along with an application on prescribed format (with latest colored passport size photo affixed on it) which is available on the CSIR-4PI website <a href="www.csir4pi.res.in">www.csir4pi.res.in</a> along with self-attested photocopies of their testimonials of Age, Educational Qualifications, Experience, Reserved Category etc. at the time of interview.
- 4. The engagement of Project Staff is initially for a period of one year from the date of joining or co-terminus with the project.
- 5. There will be no right implicit or explicit for regular position or any post in CSIR-4PI, whatsoever.
- 6. Candidates must also bring with them original certificates of testimonials at the time of appearing for the interview failing which he/she will not be allowed to appear for interview.
- 7. No travelling Allowance will be paid for attending the interview.
- 8. Candidates must ensure that they bring self-attested copies of their essential certificates otherwise, their applications will not be accepted.
- 9. The selection Committees(s) may adopt the selection criterion at its own i.e, either by conducting direct interview or written test followed by interview on the same day OR on another day.
- 10. The Competent Authority reserves the right to relax any of the provisions contained in this advertisement on reasonable ground.
- 11. The performance of the Project Staff would be reviewed after every six-months period and any one not found up to the mark may be terminated.
- 12.In case no eligible candidate is found suitable for a post, the post may be downgraded to be filled with suitable candidates. Hence, the number of posts for a particular post code may be increased or decreased.
- 13.In the absence of Degree Certificate, provisional certificates along with the marksheets pertaining to the degree will be considered.

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14. The decision of the Director, CSIR-4PI, Bengaluru shall be final on any matter relating to engagement of above-mentioned positions in CSIR-4PI, Bengaluru.

NOTE: 1. Result awaited candidates are not eligible for interview

2. No interim enquiry will be entertained.

Controller of Administra CSIR-4PI