

Dr. K. Senthil Kumar Professor & Director

Engagement of Project Staff (Temporary)

The Centre for Aerospace Research has undertaken a Project titled **"Design, Development and Prototype Testing of Advanced Desert/High Altitude Swarm Drones"** for a period of One Year. Eligible candidates should submit their CV's on or before 23/06/2024 to the following address through post and the scanned copies of the application may be sent to the below mentioned E-mail id.

The Director, Centre for Aerospace Research MIT Campus, Anna University, Chennai – 600 044 E-mail: <u>dircasr@annauniv.edu</u>, <u>casr1516@gmail.com</u>

S. No	Designation	Qualification	Vacancy	Salary
1	Project scientist (Team Lead - Hardware and Testing)	Education: Ph.D. Avionics / Aerospace/ Electrical & Electronics / Instrumentation / Communication engineering / Equivalent Or	1	Rs.1,00,000
		M.E/MS (Engg) Avionics / Aerospace/ Electrical & Electronics / Instrumentation / Communication engineering / Equivalent with 4+ Years' Experience in UAV field		
		Essential Qualification:		
		 Knowledge in UAV Control System, Navigation and Guidance. Must have experience in UAV Integration of all categories including VTHT, VTOL, Fixed Wing. Must have experience in UAV Flying Must have experience in integrating and Flying Swarm UAV. Ability to identify and troubleshoot both hardware and software of the UAV Systems. Must have wide Knowledge about the Current UAV Technologies. Must have knowledge and Experience in GCS (Ground Control Station) Operations. Must have Knowledge and Experience in Various Payload Identification and Integration. Must have Knowledge and Experience in UAV Power System Optimization. 		



		 Have to be flexible with Timings and Various Field Conditions. Able to Adapt and Lead the Team under Various Circumstances. Desired Qualification Should have previous experience in Swarm Drone Projects Should have knowledge on Swarm Drone communication systems / Mesh Network. 		
2	Project scientist (Team Lead - Simulation and Software)	 Education: Ph.D. Avionics/ Aerospace/ Electrical & Electronics / Instrumentation Communication engineering / Equivalent Or M.E/MS (Engg) Avionics/ Aerospace/ Electrical & Electronics / Instrumentation / Communication engineering / Equivalent with 4+ Years' Experience in UAV field. Essential Qualification: Knowledge in UAV Simulation Must have experience in UAV algorithm development. Must have experience in UAV algorithm development. Should have programming knowledge. Must have wide Knowledge about the Current UAV Technologies. Must have knowledge on various UAV Payloads. Must have knowledge on Swarm Drone Architecture. Have to be flexible with Timings and Various Field Conditions. Able to Adapt and Lead the Team under Various Circumstances. 	1	Rs.1,00,000



3	Project Associate II (AI Engineer)	Education: M.E/MS (Engg) Navigation /Avionics / Aerospace/ Electrical / Electronics / Communication engineering / Equivalent with 2+ years' experience	2	Rs.60,000
		Or		
		BE EEE/ECE/Communication/CSE/Aero/Navigation / Equivalent with 4+ years' experience.		
		Essential Qualification:		
		 Knowledge in UAV Simulation Must have experience in UAV algorithm development. Must have experience in AI model Development. Should have programming knowledge. Must have wide Knowledge about the Current UAV Technologies. Must have knowledge on various UAV Payloads. Must have experience in Machine Learning. Must have Knowledge on Swarm Drone Architecture. Have to be flexible with Timings and Various Field Conditions. 		
4	Project Associate II (UAV System Engineer)	Education: M.E/MS (Engg) Navigation /Avionics / Aerospace/ Electrical / Electronics / Communication engineering / Equivalent with 2+ years' experience	1	Rs.60,000
		Or		
		BE EEE/ECE/Communication/CSE/Aero/Navigation / Equivalent with 4+ years' experience.		
		Essential Qualification:		
		 Must Have Vast Knowledge and Experience in UAV Control Systems. Must have wide Knowledge about the Current UAV Technologies. Must have Keen Knowledge about UAV Navigation, Guidance and Control Must Have Wide Knowledge about UAV Communication Systems. 		



	 Knowledge and Experience in UAV Operation Field co-ordination Should have Knowledge in UAV avionics and Communication systems Have to be flexible with Timings and Various Field Conditions. 		
5 Project Associate II (Design Engineer)	Education: ME/MS (Engg) Aerospace /Aerospace Structures / Aeronautical / Mechanical / CAD-CAM / Equivalent with 2+ years' experience Or	1	Rs.60,000
	BE Aerospace /Aerospace Structures / Aeronautical / Mechanical / CAD-CAM / Equivalent with 4+ Years' Experience		
	Essential Qualification:		
	 Must Have Vast Knowledge in UAV Structures. Must Have Knowledge and Experience in UAV Fabrications. Must Have Knowledge and Experience in analysis Tools. Must Have Knowledge and Experience in Design Software's. Knowledge in UAV Flying. Knowledge in 3D Printing, CNC Machining and Foam cutting. Must Have Knowledge and in UAV Payload bay Design and Fabrication. Have to be flexible with Timings and Various Field Conditions. 		
6 Project Associate II (Test Pilot)	Education: ME/MS (Engg) Aerospace /Aerospace Structures / Aeronautical / Mechanical / CAD-CAM / Equivalent 2+ years' experience Or	1	Rs.60,000
	BE Aerospace /Aerospace Structures / Aeronautical / Mechanical / CAD-CAM / Equivalent with 4+ Years' Experience		
	Essential Qualification:		
	> Must have experience in UAV Flying in		



		 Rotorcraft, Fixed Wing and VTOL Fixed Wing Ability to identify and troubleshoot both hardware and software of the UAV Systems. Must have wide Knowledge about the Current UAV Technologies. Must have knowledge and Experience in GCS (Ground Control Station) Operations. Must have Knowledge and Experience in Various Payload Identification and Integration. Must have Knowledge and Experience in UAV Power System Optimization. Have to be flexible with Timings and Various Field Conditions. 		
		 Desired Qualification: ➢ Should possess DGCA certified RPC in Small and Medium Class Drones 		
7	Project Associate II (Structures Engineer)	Education: ME/MS (Engg) Aerospace /Aerospace Structures / Aeronautical / Mechanical with 2+ Years' Experience Or	1	Rs.45,000
		BE Aerospace /Aerospace Structures / Aeronautical / Mechanical / CAD-CAM with 4+ Years' Experience		
		Essential Qualification:		
9		 Must Have Vast Knowledge in Aerospace Structures. Must have knowledge and experience on documentation handling. Must Have Knowledge and Experience in Structural Testing and Analysis. Must Have Knowledge in analysis Tools. Must Have Knowledge in Design Software's. Must Have Knowledge in Design Software's. Knowledge in 3D Printing, CNC Machining and Foam cutting. Have to be flexible with Timings and Various Field Conditions. 	2	P= 25 000
8	Project Associate I (Swarm Simulation Engineer)	Education: B.E/BTech ECE/EEE/CSE/IT/Equivalent Essential Qualification:	2	Rs.35,000
		Knowledge in System in the Loop Simulation		



		 Knowledge in Swarm Drone Algorithms. Knowledge in Swarm Drone Architecture 		
		 Knowledge and Hands-on Experience in 		
		programming Languages like Python, C, etc.		
		 Knowledge in JavaScript and SQL. 		
		 Have to be flexible with Timings and Various 		
		Field Conditions.		
9	Project Associate I (GCS Software	Education: B.E/BTech ECE/EEE/CSE/IT/ Equivalent	2	Rs.35,000
	Engineer)	Essential Qualification:		
		Knowledge in GCS Software Development		
		≻ Knowledge and Experience in API		
		development.		
		Knowledge in Swarm Drone Algorithms.		
		Knowledge in Swarm Drone Architecture		
		➢ Knowledge and Hands-on Experience in		
		programming Languages like Python, C, etc.		
		Knowledge in HTML, Java, and SQL.		
		➢ Have to be flexible with Timings and Various		
10		Field Conditions.	2	D 25 000
10	Project Associate I	Education: B.E/BTech ECE/EEE/CSE/IT/ Equivalent	2	Rs.35,000
	(IOT Engineer)	Essential Qualification:		
		Essential Quantication.		
		➢ Knowledge in Image Processing Techniques		
		for Object Identification		
		Knowledge and Experience in AI development.		
		Knowledge in Swarm Drone Algorithms.		
		Knowledge in Swarm Drone Architecture		
		➢ Knowledge and Hands-on Experience in		
		programming Languages like Python, C, etc.		
		Knowledge in Machine Learning.		
		➢ Have to be flexible with Timings and Various □ Tight Completions		
11	Duciant Accessions	Field Conditions.	1	Da 25 000
11	Project Associate I	Education: B.E / BTech Aero / Mechanical / ECE /	1	Rs.35,000
	(Drone Pilot)	EEE / Equivalent		
		Essential Qualification:		
		Knowledge and Experience in Drone Flying		
		 Knowledge and Experience in Drone Hying Knowledge in assembling and troubleshooting 		
		the drone		
		 Knowledge in GCS Operation 		
		▶ Knowledge and Experience in Drone		



		Maintenana		
		Maintenance ➤ Should have valid DGCA certified RPC		
10		Should have knowledge on recent UAV trends	1	D 25 000
12	Project Associate I (Communication	Education: B.E/BTech ECE/EEE/CSE/IT/ Equivalent with 2 years' Experience	1	Rs.35,000
	Engineer)			
		Or		
		M.E/MS (Engg) Navigation /Avionics / Aerospace/ Electrical / Electronics / Communication engineering / Equivalent		
		Essential Qualification:		
		 Knowledge and Experience in RF Communication Knowledge in Digital Electronics Knowledge in Drone Avionics Components 		
		 Knowledge in Swarm Drone Architecture Knowledge in programming Arduino and Embedded Systems 		
		 Knowledge in UAV Flight Controllers Have to be flexible with Timings and Various 		
		Field Conditions.		
13	Project Associate I	Education: B.E/BTech ECE/EEE/CSE/IT/ Equivalent	3	Rs.30,000
	(Software		5	103.50,000
	Engineer)	Essential Qualification:		
		Knowledge in GCS Software Development		
		 Knowledge in API development. 		
		 Knowledge in Swarm Drone Algorithms. 		
		 Knowledge in Swarm Drone Architecture 		
		➢ Knowledge in programming Languages like		
		Python, C, etc.		
		Knowledge in Full Stack Development.		
		Have to be flexible with Timings and Various Field Conditions.		
14	Project Associate I (Image Processing	Education: B.E/BTech ECE/EEE/CSE/IT/ Equivalent	1	Rs.30,000
	Engineer)	Essential Qualification:		
		> Knowledge in Image Processing Techniques		
		for Object Identification		
		Knowledge in AI and ML		
		Knowledge in Swarm Drone Algorithms.		



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		Knowledge in Swarm Drone Architecture		
		➢ Knowledge in programming Languages like		
		Python, C, etc.		
		➢ Have to be flexible with Timings and Various		
		Field Conditions.		
15	Project Associate I	Education: B.E/BTech ECE/EEE/CSE/IT/ Equivalent	1	Rs.30,000
	(Electronics			
	Engineer)	Essential Qualification:		
		Knowledge in IOT		
		Knowledge in Digital Electronics		
		Knowledge in Drone Avionics Components		
		Knowledge in Swarm Drone Architecture		
		> Knowledge in programming Arduino and		
		Embedded Systems		
		➢ Have to be flexible with Timings and Various		
		Field Conditions.		
16	Project Technician	Education: Any Diploma/Degree	5	Rs.20,000
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		Essential Qualification:		
		Basic knowledge in UAV		
		\succ Must have knowledge in basic computer		
		operations and MS Office.		
		 Have to Flexible with timings. 		
		> Should be physically and mentally sound to		
		adapt with various field conditions.		
		> Able to travel and assist with team in various		
		field conditions.		
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Note:

• In spite of eligibly, the candidates with swarm Drone Knowledge / experience may also apply with the necessary documents and they may also be considered for the engagement in project.

• The above mentioned salary / remuneration were the tentative figures only it may vary based on the candidate's experience & knowledge