Proforma

Companies open to your department

Agnikul Cosmos Company:

Company Agnikul Cosmos Name:

Nature Of Business:

Manufacturing

Designation: Space Robotics and Controls Engineer

Tentative Job Location:

Chennai

Space Robotics and Controls Engineer Eligibility We strongly prefer working with individuals who are passionate about aerospace and are willing to work with us for the long term. WHAT IT TAKES • If you like to think the other extreme of the north pole is north "zero†- this is for you. • If you don't need someone to tell you LQR is good enough - this is for you. • If you believe lead-lag compensation is the essence of all human interactions - this is for you. RESPONSIBILITIES • Works on independent sections of controller design and integration process for launch vehicle control systems and related components in the vehicle's guidance systems. • Specifically, o Aid in the development of Autopilot linear stability testing and analysis. o Design Non-linear 6DOF simulation analysis and scenario analysis. o Review system level and launch vehicle requirements. o Lead development and maintenance of software tools that predict pre-flight performance under nominal, off-nominal conditions. o Perform post flight verification of simulation predictions and Monte Carlo through multiple flight conditions. o Create hazards assessment programs and tools to understand probability of impact and expected damage from off-nominal and failure modes, o Support design reviews and milestones as necessary. • Assists independent sections of propulsion control systems. • Aid specifically, the development of some or all of the following, o Design of Mixture ratio control & stability analysis. o Integration of mixture ratio control, electric motor speed control and propellant utilization loops. o Development of system level requirements for cross coupled dynamics between propellant utilization algorithms and vehicle guidance / autopilot algorithms. o Support design reviews and milestones as necessary. • Supports hardware design & implementation of the vehicle across multiple control systems. o Analog and mixed signal design with focus on launch vehicle hardware. o Board level design for both ground checkout systems and flight hardware. o Support design reviews and milestones as necessary.

Description:

Eligibilty:

BASIC QUALIFICATIONS • Bachelors / Master's Degree in Controls Engineering, Electrical engineering, Electronics &

Communications engineering. • Highly developed computer skills using EE design/analysis software. • Decent software programming skills. PREFERRED SKILLS AND EXPERIENCE • Ph.D. in Electrical engineering, Electronics & Communications engineering. • Good understanding of product development and Control network (CAN). • 1+ experience with mechanical systems and engines. • Good understanding of engine controller design and implementation. • Good understanding of orbital mechanics, multi-body dynamics, and controlsstructures interaction. • Experience with static constrained optimization, calculus of variations, dynamic optimization, maximum principle. ADDITIONAL REQUIREMENTS • Must be available to work extended hours and weekends as needed. What you could take away? • Your work will directly impact the company's (and the rocket's) trajectory. • You will learn rocket science from some of the most senior and respected minds in ISRO. • You will work on shaping space policy in India. • You will dirty your hands in a global supply/chain optimization problem.

Location: Chennai, India Employment Type: Full Time

Department BT BS MT DoubleMajor dual dualB dualC Mdes MBA Phd MSc MSR

AE	Y	-	Y	Y	Y	Y	Y	-	-	N	-	Y	
BSBE	Y	-	Y	Y	Y	Y	Y	-	-	N	-	Y	
CE	Y	-	Y	Y	Y	Y	Y	-	-	N	-	Y	
CHE	Y	-	Y	Y	Y	Y	Y	-	-	N	-	Y	
CSE	Y	-	Y	Y	Y	Y	Y	-	-	N	-	Y	
EE	Y	-	Y	Y	Y	Y	Y	-	-	N	-	Y	
ES	-	Y	Y	-	Y	-	Y	-	-	N	-	-	
ME	Y	-	Y	Y	Y	Y	Y	-	-	N	-	Y	
MSE	Y	-	Y	Y	Y	Y	Y	-	-	N	-	Y	
PHY	-	Y	-	Y	Y	Y	Y	-	-	N	Y	-	
CHM	-	Y	-	Y	Y	Y	Y	-	-	N	Y	-	
MTH	-	Y	-	Y	Y	Y	Y	-	-	N	Y	-	
ECO	-	Y	-	Y	Y	Y	Y	-	-	N	-	-	
DES	-	-	-	-	-	-	Y	N	-	N	-	-	
IME	-	-	Y	-	-	Y	Y	-	N	N	-	-	

CGS	-	-	-	-	-	-	-	-	-	N	-	Y
HSS	-	-	-	-	-	-	-	-	-	N	-	-
EEM	-	-	Y	-	-	Y	-	-	-	N	-	-
MSP	-	-	Y	-	-	-	-	-	-	N	-	-
NET	-	-	Y	-	-	Y	-	-	-	N	-	-
PSE	-	-	Y	-	-	Y	-	-	-	N	-	Y
Stats	-	-	-	-	-	-	-	-	-	N	Y	-

Cost to Company :

B.Tech - 15 LPA

M.Tech - 10 LPA

Statutory Compliance Provident Fund (P.F.) h 1800 21600 Subject to Maximum of 15,000 (Basic) Employee State Insurance (E.S.I.) Professional Tax j 209 2508 Group Medical and Personal Accident Insurance T&C* Total Deduction (h+i+j+k+l) m 15,438 1,85,256 Deduction for ESI, Income Professional T Variable Components Esops (Share,Stock etc.) n Nil Nil Nil Nil Nil Incentive) PLI (Performance Link Incentive) o 25000 300000 It is purely lir to the perform which will be as per the compolicy (ONCI YEAR PAYME ONLY)	Salary breakup for B.Tech										
Basic Salary a 45000 540000	Salary Components (Break-up)										
Dearness Allowance	Particulars	No.	Monthly	Yearly	Remarks						
Discrimination Color Col	Basic Salary	a	45000	540000							
Other Allowance d 25000 300000 Special Allowance e 25000 300000 LTA (Leave Travel Allowance) f Nil	Dearness Allowance	b	5000	60000							
Special Allowance e 25000 300000 LTA (Leave Travel Allowance) f Nil	HRA (House Rent Allowance)	С	25000	300000							
Special Allowance e 25000 300000 LTA (Leave Travel Allowance) f Nil	Other Allowance	d	25000	300000							
Allowance) Gross Salary (a+b+c+d+e+f) g 1,25,000 15,00,000 Cost to Comp Statutory Compliance	Special Allowance	е									
Statutory Compliance	· · · · · · · · · · · · · · · · · · ·	f	Nil	Nil							
Provident Fund (P.F.) h		g	1,25,000	15,00,000	Cost to Company						
Provident Fund (P.F.) h	Statutory Compliance		-								
TDS (Tax Deducted at Source) Total Deduction (h+i+j+k+l) Tot		h	1800	21600	Subject to Maximum of Rs. 15,000 (Basic + DA)						
Group Medical and Personal Accident Insurance T&C* TDS (Tax Deducted at Source) Total Deduction (h+i+j+k+l) m 15,438 1,85,256 Deduction for ESI, Income Professional T Variable Components Esops (Share,Stock etc.) n Nil Nil Nil Nil Nil PLI (Performance Link Incentive) Deduction for ESI, Income Professional T 1	The second secon	i	Nil	Nil							
TDS (Tax Deducted at Source) Total Deduction (h+i+j+k+l) m 15,438 1,85,256 Deduction for ESI, Income Professional T Variable Components Esops (Share,Stock etc.) n Nil Nil Nil Nil PLI (Performance Link Incentive) Deduction for ESI, Income Professional T 300000 It is purely lir to the perform which will be as per the compolicy (ONCI YEAR PAYME ONLY)	Professional Tax	j	209	2508							
Total Deduction (h+i+j+k+l) m 15,438 1,85,256 Deduction for ESI, Income Professional T Variable Components Esops (Share,Stock etc.) n Nil Nil Nil Nil PLI (Performance Link Incentive) 0 25000 300000 It is purely lir to the perform which will be as per the compolicy (ONCI YEAR PAYME ONLY)	· · · · · · · · · · · · · · · · · · ·	k	406	4872							
Variable Components Esops (Share, Stock etc.) PLI (Performance Link Incentive) Output Description: Output		l	13023	156276							
Esops (Share, Stock etc.) PLI (Performance Link Incentive) O 25000 Stis purely ling to the perform which will be as per the compolicy (ONCI YEAR PAYME ONLY)	Total Deduction (h+i+j+k+l)	m	15,438	1,85,256	Deduction for PF, ESI, Income and Professional Taxes						
PLI (Performance Link Incentive) O 25000 300000 It is purely ling to the perform which will be as per the compolicy (ONCI YEAR PAYME ONLY)	Variable Components		-								
Incentive) to the perform which will be as per the compolicy (ONCI YEAR PAYME ONLY)		n									
Bonus (Joining bonus etc.) p Nil Nil Paid as per t		0	25000	300000	It is purely linked to the performance which will be paid as per the company policy (ONCE A YEAR PAYMENT ONLY)						
	Bonus (Joining bonus etc.)	р	Nil	Nil	Paid as per the company policy						
Total Variable Components q 25,000 3,00,000 (n+o+p)		q	25,000	3,00,000							

Salary Breakup for M.Tech

Salary Components (Break-up)										
Particulars	No.	Monthly	Yearly	Remarks						
1 di cicatai b		mornerity	. cu. ty	itema its						
Basic Salary	a	26250	315000							
Dearness Allowance	b	2917	35004							
HRA (House Rent Allowance)	С	14583	174996							
Other Allowance	d	14583	174996							
Special Allowance	е	25000	300000							
LTA (Leave Travel Allowance)	f	Nil	Nil							
Gross Salary (a+b+c+d+e+f)	g	83333	9,99,996	Cost to Company						
Statutory Compliance		-								
Provident Fund (P.F.)	h	1800	21600	Subject to Maximum of Rs. 15,000 (Basic + DA)						
Employee State Insurance (E.S.I.)	i	Nil	Nil							
Professional Tax	j	209	2508							
Group Medical and Personal Accident Insurance T&C*	k	406	4872							
TDS (Tax Deducted at Source)	ι	3265	39180							
Total Deduction (h+i+j+k+l)	m	5,680	68,160	Deduction for PF, ESI, Income and Professional Taxes						
Variable Components		-								
Esops (Share, Stock etc.)	n	Nil	Nil	Nil						
PLI (Performance Link Incentive)	0		300000	It is purely linked to the performance which will be paid as per the company policy (ONCE A YEAR PAYMENT ONLY)						
Bonus (Joining bonus etc.)	р	Nil	Nil	Paid as per the company policy						
Total Variable Components (n+o+p)	q		3,00,000							
Net Salary -Â (g-m-q)	r	52,653	6,31,836							

Bond: False

Medical Requirements

Resume Shortlist:

True

Resume Shortlist

N/A

Criteria:

Aptitude Test 2 hrs

Aptitude Test:

True

Duration: Group True Discussion: Group Discussion 2 hrs Duration: Group Discussion Strengtd: Technical True Test: Technical Test 2 hrs Duration: Technical True Interview: Technical Interview 2 hrs Duration: Number of

Techincal 2 Interview Rounds:

HR True Interview:

HR Interview 2 hrs Duration: