

Job Title		Research Associate - RF Design Engineer	
No. of Positions		01	
Duration		3 Years	
School/Institute/Centre		SINES	
1	Purpose of Position		
	The RF Design Engineer shall be responsible to design the RF front-end of the radar system.		
2	Functions/Duties (Key Responsibilities)		
	RF Design Engineer should be able to: <ul style="list-style-type: none"> • Design, Analyze and work with RF modules & sub-systems • Design PCBs • Stuff and test the designed modules • Handle RF equipment • Knowledge of precautions for handling RF components and equipment 		
3	Requirements		
Qualifications	Essential	Desired	
	Bachelors in Electronics/Electrical Engineering or relevant field with experience from HEC recognized institution	Master's degree in EE or relevant field with experience in RF & Microwave	
Experience	1 year experience in RF & Microwave	2 years experience in RF & Microwave	
Knowledge/ Skills/Abilities/ Competencies	<ul style="list-style-type: none"> • RF & Microwave skills • Report writing skills • PCB designing skills • Circuit designing skills • Knowledge of RF/EMC compliance standards • Able to use test equipment/instruments • Able to communicate with other team members 		
4	How to Apply		
Please email your resume to projectposition@sines.nust.edu.pk only if you fulfil the criteria mentioned above with job title "RF Design Engineer" in the subject field by 15th April 2022 .			

Job Title		Research Associate - Antenna Design Engineer	
No. of Positions		01	
Duration		3 Years	
School/Institute/Centre		SINES	
1	Purpose of Position		
	The Antenna Design Engineer shall be responsible to design the antenna assembly of the radar system.		
2	Functions/Duties (Key Responsibilities)		
	Antenna Design Engineer should be able to: <ul style="list-style-type: none"> • Design, Analyze and work with antenna assemblies, modules & sub-systems • Design PCBs • Stuff and test the designed modules • Handle RF equipment • Knowledge of precautions for handling RF components and equipment 		
3	Requirements		
	Essential		Desired
Qualifications	Bachelors in Electronics/Electrical Engineering or relevant field with experience from HEC recognized institution		Master's degree in EE or relevant field with experience in Antenna /RF & Microwave
Experience	1 year experience in Antenna /RF & Microwave		2 years experience in Antenna /RF & Microwave
Knowledge/ Skills/Abilities/ Competencies	<ul style="list-style-type: none"> • Antenna / RF & Microwave skills • Antenna characterization skills • Report writing skills • Well versed with antenna design EM software tools • Knowledge of RF/EMC compliance standards • Able to use test equipment/instruments • Able to communicate with other team members 		
4	How to Apply		
	Please email your resume to projectposition@sines.nust.edu.pk only if you fulfil the criteria mentioned above with job title "Antenna Design Engineer" in the subject field by 15th April 2022 .		

Job Title		Research Associate - Signal Processing /Embedded System Engineer	
No. of Positions		01	
Duration		3 Years	
School/Institute/Centre		SINES	
1	Purpose of Position		
The Signal Processing / Embedded System Engineer shall be responsible to design signal processing algorithms and use embedded and power sub-systems for the overall radar system. The primary task of embedded design engineer is to map control and signal processing functions of radar on different hardware platforms. This includes knowledge of signal processing algorithms and different processing platforms including FPGAs, embedded GPUs, DSPs.			
2	Functions/Duties (Key Responsibilities)		
Signal Processing / Embedded System Engineer should be able to: <ul style="list-style-type: none"> • Design signal processing chain for radar • Performance quantification of algorithms • Analyze data and perform data acquisition through multiple interfaces • Design target detection and classification algorithms using AI/ML • Work with FPGAs, microcontrollers, embedded GPUs, edge compute devices • Map control, signal processing and AI modules on software and hardware • Design embedded and power module circuits • Integrate and test the designed modules with other sub-systems 			
3	Requirements		
Qualifications	Essential	Desired	
	Bachelors in Electronics/Electrical Engineering or relevant field with experience from HEC recognized institution	Master's degree in EE or relevant field with experience in Radar	
	Experience	Min 1 year in similar role	2 years experience in Embedded Systems and/or Power Electronics
Knowledge/ Skills/Abilities/ Competencies	<ul style="list-style-type: none"> • Hands on Digital Signal Processing skills • Understanding of ML algorithms for detection and classification • Be able to acquire data from a variety of communication interfaces 		

- Hands on experience of performing signal processing simulations, filtering methods in MATLAB Simulink or other tools
- Be able to evaluate performance of algorithms
- Digital system design using FPGAs (Verilog/VHDL)
- Microcontrollers software development and testing skills
- Power Electronics software and testing skills
- Circuit designing skills
- Intellectually curious, should be a quick learner and not hesitant to try new tools
- Report writing skills
- Able to use test equipment/instruments
- Able to communicate with other team members

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How to Apply

Please email your resume to projectposition@sines.nust.edu.pk only if you fulfil the criteria mentioned above with job title “**Signal Processing /Embedded System Engineer**” in the subject field by **15th April 2022**.