

<b>Job Title</b>		<b>Research Associate - Embedded System Engineer</b>	
<b>No. of Positions</b>		<b>01</b>	
<b>School/Institute/Centre</b>		<b>SINES</b>	
<b>1</b>	<b>Purpose of Position</b>		
The Embedded System Engineer shall be responsible to design 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 different processing platforms including FPGAs, embedded GPUs, DSPs.			
<b>2</b>	<b>Functions/Duties (Key Responsibilities)</b>		
<p>Embedded System Engineer should be able to:</p> <ul style="list-style-type: none"> <li>• Extract control and processing platform requirements</li> <li>• Hardware-software partitioning</li> <li>• Work with FPGAs, microcontrollers, embedded GPUs, edge compute devices</li> <li>• Map control, signal processing and AI modules on software and hardware</li> <li>• Design embedded and power module circuits</li> <li>• Integrate and test the designed modules with other sub-systems</li> </ul>			
<b>3</b>	<b>Requirements</b>		
		<b>Essential</b>	<b>Desired</b>
<b>Qualifications</b>	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
<b>Experience</b>	Min 1 year in similar role		2 years experience in Embedded Systems and/or Power Electronics
<b>Knowledge/ Skills/Abilities/ Competencies</b>	<ul style="list-style-type: none"> <li>• Digital system design using FPGAs (Verilog/VHDL)</li> <li>• Microcontrollers software development and testing skills</li> <li>• Power Electronics software and testing skills</li> <li>• Circuit designing skills</li> <li>• Intellectually curious, should be a quick learner and not hesitant to try new tools</li> <li>• Report writing skills</li> <li>• Able to use test equipment/instruments</li> <li>• Able to communicate with other team members</li> </ul>		
<b>4</b>	<b>How to Apply</b>		
Please email your resume to <a href="mailto:rri@sines.nust.edu.pk">rri@sines.nust.edu.pk</a> only if you fulfil the criteria mentioned above with job title "Embedded System Engineer" in the subject field by <b>07<sup>th</sup> January 2025</b> .			

<b>Job Title</b>		<b>Task based Resource / Technician</b>	
<b>No. of Positions</b>		<b>01</b>	
<b>School/Institute/Centre</b>		<b>SINES</b>	
<b>1</b>	<b>Purpose of Position</b>		
<p>The Embedded System Engineer shall be responsible to design 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 different processing platforms including FPGAs, embedded GPUs, DSPs.</p>			
<b>2</b>	<b>Functions/Duties (Key Responsibilities)</b>		
<p>Embedded System Engineer should be able to:</p> <ul style="list-style-type: none"> <li>• Extract control and processing platform requirements</li> <li>• Hardware-software partitioning</li> <li>• Work with FPGAs, microcontrollers, embedded GPUs, edge compute devices</li> <li>• Map control, signal processing and AI modules on software and hardware</li> <li>• Design embedded and power module circuits</li> <li>• Integrate and test the designed modules with other sub-systems</li> </ul>			
<b>3</b>	<b>Requirements</b>		
<b>Qualifications Experience</b>	<b>Essential</b>		
	FSc / ICS		
	Min 1 year in similar role		
	<ul style="list-style-type: none"> <li>• <b>Basic Computer Proficiency</b> <ul style="list-style-type: none"> <li>○ Ability to operate computers, use web browsers, and work with annotation tools or software efficiently.</li> <li>○ Familiarity with basic file management (uploading, saving, organizing).</li> </ul> </li> <li>• <b>Knowledge of Image Annotation Tools</b> <ul style="list-style-type: none"> <li>○ Experience with popular annotation tools like LabelImg, CVAT, RectLabel, Supervisely, or other in-house tools.</li> <li>○ Understanding of different annotation methods: <ul style="list-style-type: none"> <li>○ Bounding boxes</li> <li>○ Polygons</li> <li>○ Semantic segmentation</li> <li>○ Keypoints</li> <li>○ Object masking</li> </ul> </li> </ul> </li> <li>• <b>Image and Data Quality Management</b> <ul style="list-style-type: none"> <li>○ Ability to identify blurry, incomplete, or inconsistent data/images and flag them for review.</li> </ul> </li> </ul>		
<b>4</b>	<b>How to Apply</b>		
<p>Please email your resume to <a href="mailto:rrl@sines.nust.edu.pk">rrl@sines.nust.edu.pk</a> only if you fulfil the criteria mentioned above with job title “<b>Embedded System Engineer</b>” in the subject field by <b>07<sup>th</sup> January 2025</b>.</p>			