

ROLE DOCUMENT - Automotive cybersecurity Lab		
<b>ROLE HOLDER REQUIREMENTS</b>	<b>Minimum Qualification</b>	ME/MTech or BE/BTech with work experience in the area of Automotive cyber security
<b>KNOWLEDGE &amp; SKILLS</b>	<b>Technical Knowledge</b>	<p><b>"Must have":</b>            In-depth knowledge of vehicle network security: Familiarity with key communication protocols like CAN, LIN, FlexRay, and Ethernet. Expertise in cryptography: Its application in automotive systems. Experience with threat modelling and vulnerability analysis. Knowledge of Automotive Fuzzing Methodology and hardware security features such as HSM (Hardware Security Module). Familiarity with secure software development and penetration testing techniques.            Understanding of OTA (Over-the-Air) updates and secure boot mechanisms.            Knowledge of industry standards like ISO/SAE 21434 and UNECE WP.29.            knowledge of TARA (Threat Assessment and Remediation Analysis) and Tools like NMAP and BurpSuite.</p> <p><b>"Good to have":</b>            1-2 year of industry experience in automotive</p>
	<b>Behavioral Competencies</b>	Effective communicator, ability to coordinate and resolve conflicts, good team player
<b>PURPOSE</b>	1. Develop, deploy and maintain WILP labs in the areas of automotive cyber security 2. Support student learning as per the course/ program requirement - requires scheduling and conducting labs, and evaluation	
<b>KEY RESPONSIBILITIES</b>		<b>AREAS OF RESPONSIBILITY (Key Activities)</b>
		<b>Lab deployment</b>
	1	Deploy labs to the WILP students as per the course requirement and assess the lab components on time under the guidance of course faculty
		<b>Lab development</b>
	2	1. Lab development in emerging areas of automotive cyber security - support the responsible faculty and the Experiential Learning Lead (ELL) from initiation, through proposal, procurement, commissioning, installation and development 2. Develop lab exercises under the guidance of course faculty 3. Support the creation of audio-visuals for marketing/training purposes
	<b>Lab maintenance</b>	
3	Work with the Experiential Learning Lead (ELL) and the respective lab faculty for maintenance of lab equipment, and upkeep of software licenses	
	<b>Student support</b>	
4	Prompt resolution of student queries related to labs	
<b>OBJECTIVES</b> Top KRAs across all activities	Feedback from WILP students and course faculty	