

## **Curricular internship application form**

INTERNSHIP JOB TITLE  (Indicates the professional role comparable to the activities performed	Log Analysis and Correlation using ML/AI models					
by the trainee).  Applicant company	TIM S.p.A.					
Requesting Line Function	IP & Transport – Software Defined Networks					
Tutor  (Indicate the name and references of the colleague who will act as tutor)	Antonio Giannone					
HRO Reference	Silvia Vercelli					
Requested professional profile	Master's Degree Bachelor's Degree Diploma Master Student					
Place of work	Turin with possibility to work remotely					
Job Description of the internship  (Describe in a simple and exhaustive way the activities that will be carried out by the resource)	<ul> <li>Investigate ML/AI models that could be used to improve log analysis and correlation operations useful for:         <ul> <li>troubleshooting processes identifying the root cause of an issue correlating multiple anomalies collected from the supervised environment;</li> <li>making predictions to prevent issues acting in advance (i.e. replacing a malfunctioning network element).</li> </ul> </li> </ul>					
Key skills and competences required by the role  (Indicate the basic skills and transversal skills necessary to fill the requested role)	<ul> <li>Ability to benchmark already developed solutions identifying possible lacks and improvements;</li> <li>Attitude to work in a highly structured environment interacting with different teams.</li> </ul>					
Technical skills  (Indicate the technical and practical knowledge required and the use of methods, materials, tools - necessary to fill the requested role)	<ul> <li>Experience with clustered data processing architectures (i.e. Hadoop, Spark, Map-Reduce, Hive);</li> <li>Basic knowledge in:         <ul> <li>Python and Java programming;</li> <li>Data analysis and manipulation tool like Pandas;</li> <li>ML/AI most used frameworks like SciPy or NumPy;</li> <li>IP and transport network.</li> </ul> </li> </ul>					

Language skills  (Indicate required languages and level of knowledge)	English  Novice	 Intermediate	Proficient	Advanced	Expert
Qualifications / Certifications required  (Enter the qualifications and degree courses required)		none			
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