**Annotation Input Text**

curl -X POST http://localhost:9006/annotate -H 'Content-Type: application/json' -H 'Postman-Token: e779ceb0-8ce9-44bd-ad45-279c05ff8b63' -H 'cache-control: no-cache' -d '{"tasks" : [ {"label" :"95671c903a5b97a9", "jobDescription" : "Moving Mobility Forward Aptiv is making mobility real. We are at the forefront of solving mobility toughest challenges. We have the people, experience, know-how and confidence to turn ideas into solutions. Solutions that move our world from what now to what next, while connecting us like never before. To us, nothing is impossible when you have the people with the passion to make anything possible. Mobility has the power to change the world, and we have the power to change mobility. Join our Innovative Team. Want to do more than just imagine the ways our world will move tomorrow? Here your opportunity. Join the technology company that is transforming the future of mobility today. About Aptiv Aptiv is a global technology company that develops safer, greener and more connected solutions, which enable the future of mobility. Headquartered in Dublin, Aptiv has 160,000 employees and operates 14 technical centers, as well as manufacturing sites and customer support centers in 45 countries. Visit aptiv.com. About Advanced Safety and User Experience Advanced Safety and User Experience encompasses our deep expertise in software, centralized computing platforms, advanced safety systems and automated driving focusing on five areas that are transforming mobility: Safety Electronics, Infotainment, User Experience, Autonomous Driving and Connectivity & Security. Responsibilities and duties Development and validation of Autonomous Driving SW Algorithms for Perception. Work with raw sensor data, low-level signal processing and analyze large datasets. Working in an agile environment such as Scrum. Interaction with customers and internal advanced engineering departments. Customer requirements analysis. Implementation of feature functions for embedded hardware. Testing inside SIL environments and vehicle. Issue Analysis, tracking and issue solving with JIRA. Development according to ASPICE & ISO26262. Generation and tracking of key performance indicators. Ability to travel to support customer meetings and occasional test drives. Qualifications You are a graduate of computer science, mathematics, physics, control engineering or electrical engineering (University FH: degree with very good or good) - comparable qualification possible You have at least 3 years of relevant working experience in Academia or Industry Profound knowledge of Matlab/Simulink, C++ is required Experience with ADAS or Autonomous Driving is required Experience with Linux is required Experience with Radar, LiDAR, GPU/IMUs is beneficial Experience in Computer vision, pattern recognition, sensor data processing and data fusion, probabilistic perception, point cloud processing, 3D-reconstruction, object tracking, data association, optimization, and/or machine learning/deep learning is a plus. Experience working with one of the following libraries, Tensorflow, Pytorch is a plus Experience with the following frameworks is appreciated: ROS, ADTF Optional experience with Adaptive AUTOSAR is appreciated Ability to create and support software architecture is an added advantage PhD beneficial but not required You have very good English language skills and preferably proficient German language skills Linking own Github projects in the application is welcome. We offer Freedom and interesting tasks in an environment where work is fun and where you can independently analyze problems and develop solutions We value our employees as the most important value of our company We offer flexible and family-friendly working hours We offer challenging projects with innovative technologies We compensate according to your degree and experience We enable a variety of training opportunities Your start at Aptiv: Anyone interested in software in the car and autonomous driving, will feel at home with us. Anyone who has mental agility and is prepared to face up to new challenges and become familiar with them is the right candidate for us. What we are looking for are employees who can be briefly described as: Smart and get things done.""}]}'

**Actual DOBIE Pipeline Output**

<SkillAnnotations><?xml version='1.0' encoding='UTF-8'?>

<GateDocument version="3">

<!-- The document's features-->

<GateDocumentFeatures>

</GateDocumentFeatures>

<!-- The document content area with serialized nodes -->

<TextWithNodes>Moving Mobility Forward Aptiv is making mobility real. We are at the forefront of solving mobility toughest challenges. We have the people, experience, know-how and confidence to turn ideas into solutions. Solutions that move our world from what now to what next, while connecting us like never before. To us, nothing is impossible when you have the people with the passion to make anything possible. Mobility has the power to change the world, and we have the power to change mobility. Join our Innovative Team Want to do more than just imagine the ways our world will move tomorrow? Here your opportunity. Join the technology company that is transforming the future of mobility today. About Aptiv Aptiv is a global technology company that develops safer, greener and more connected solutions, which enable the future of mobility. Headquartered in Dublin, Aptiv has 160,000 employees and operates 14 technical centers, as well as manufacturing sites and <Node id="955"/>customer support<Node id="971"/> centers in 45 countries. Visit aptiv.com. About Advanced Safety and User Experience Advanced Safety and User Experience encompasses our deep expertise in software, centralized computing platforms, advanced safety systems and automated driving focusing on five areas that are transforming mobility: Safety Electronics, Infotainment, User Experience, Autonomous Driving and Connectivity &amp; <Node id="1359"/>Security<Node id="1367"/>. Responsibilities and duties Development and validation of Autonomous Driving SW Algorithms for Perception. Work with raw sensor data, low-level signal processing and analyze large datasets. Working in an <Node id="1573"/>agile<Node id="1578"/> environment such as <Node id="1599"/>Scrum<Node id="1604"/>. Interaction with customers and internal advanced engineering departments. Customer requirements analysis. Implementation of feature functions for embedded <Node id="1761"/>hardware<Node id="1769"/>. <Node id="1771"/>Testing<Node id="1778"/> inside SIL environments and vehicle. Issue <Node id="1822"/>Analysis<Node id="1830"/>, tracking and issue solving with <Node id="1864"/>JIRA<Node id="1868"/>. <Node id="1870"/>Development<Node id="1881"/> according to ASPICE &amp; ISO26262. Generation and tracking of key performance indicators. Ability to travel to support customer meetings and occasional test drives. Qualifications You are a graduate of <Node id="2081"/>computer science<Node id="2097"/>, mathematics, physics, control engineering or electrical engineering (University FH: degree with very good or good) - comparable qualification possible You have at least 3 years of relevant working experience in Academia or Industry Profound knowledge of <Node id="2353"/>Matlab<Node id="2359"/>/Simulink, <Node id="2370"/>C++<Node id="2373"/> is required Experience with ADAS or Autonomous Driving is required Experience with <Node id="2457"/>Linux<Node id="2462"/> is required Experience with Radar, LiDAR, <Node id="2505"/>GPU<Node id="2508"/>/IMUs is beneficial Experience in Computer vision, pattern recognition, sensor data processing and data fusion, probabilistic perception, point <Node id="2652"/>cloud<Node id="2657"/> processing, 3D-reconstruction, object tracking, data association, optimization, and/or machine learning/deep learning is a plus. Experience working with one of the following libraries: Tensorflow, Pytorch is a plus Experience with the following frameworks is appreciated: <Node id="2930"/>ROS<Node id="2933"/>, ADTF Optional experience with Adaptive <Node id="2974"/>AUTOSAR<Node id="2981"/> is appreciated Ability to create and support <Node id="3027"/>software architecture<Node id="3048"/> is an added advantage PhD beneficial but not required You have very good English language skills and preferably proficient German language skills Linking own <Node id="3207"/>Github<Node id="3213"/> projects in the application is welcome. We offer Freedom and interesting tasks in an environment where work is fun and where you can independently analyze problems and develop solutions We value our employees as the most important value of our company We offer flexible and family-friendly working hours We offer challenging projects with innovative technologies We compensate according to your degree and experience We enable a variety of training opportunities Your start at Aptiv: Anyone interested in software in the car and autonomous driving, will feel at home with us. Anyone who has mental agility and is prepared to face up to new challenges and become familiar with them is the right candidate for us. What we are looking for are employees who can be briefly described as: Smart and get things done. Moving Mobility Forward Aptiv is making mobility real. We are at the forefront of solving mobility toughest challenges. We have the people, experience, know-how and confidence to turn ideas into solutions. Solutions that move our world from what now to what next, while connecting us like never before. To us, nothing is impossible when you have the people with the passion to make anything possible. Mobility has the power to change the world, and we have the power to change mobility.<Node id="4510"/></TextWithNodes>

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**DERIVED FROM THE ABOVE OUTPUT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DOBIE Skills Output** | | | | |
| Annotation ID | Node ID | String | Annotation | Kind |
| 1568 | StartNode="1864" EndNode="1868" | Jira | SkillTool | tool |
| 1569 | StartNode="2353" EndNode="2359" | MATLAB | SkillTool | tool |
| 1570 | StartNode="2370" EndNode="2373" | C++ | SkillTool | tool |
| 1571 | StartNode="2930" EndNode="2933" | ROS | SkillTool | tool |
| 1572 | StartNode="2974" EndNode="2981" | AUTOSAR | SkillTool | tool |
| 1573 | StartNode="3207" EndNode="3213" | GitHub | SkillTool | tool |
| 1574 | StartNode="955" EndNode="971" | CustomerSupport | SkillTopic | topic |
| 1575 | StartNode="1359" EndNode="1367 | Security | SkillTopic | topic |
| 1576 | StartNode="1870" EndNode="1881" | Development | SkillTopic | topic |
| 1577 | StartNode="1573" EndNode="1578" | Agile | SkillTopic | topic |
| 1578 | StartNode="1599" EndNode="1604" | Scrum | SkillTopic | topic |
| 1579 | StartNode="1822" EndNode="1830" | Analysis | SkillTopic | topic |
| 1580 | StartNode="1761" EndNode="1769" | Hardware | SkillTopic | topic |
| 1581 | StartNode="1771" EndNode="1778" | Teting | SkillTopic | topic |
| 1582 | StartNode="2081" EndNode="2097" | ComputerScience | SkillTopic | topic |
| 1583 | StartNode="2505" EndNode="2508" | GPU | SkillTopic | topic |
| 1584 | StartNode="2652" EndNode="2657" | Cloud | SkillTopic | topic |
| 1585 | StartNode="3027" EndNode="3048" | SoftwareArchitecture | SkillTopic | topic |
| 1586 | StartNode="2457" EndNode="2462" | Linux | SkillProduct | product |

So in general, from that text: the table shows the skills that were found. I have manually underlined what I would consider as skills and/or qualifications. The normal NER such as location, person are not really of interest to the task. The idea is to add more of these annotations to the list i.w. If like there are some in DBpedia.

**Named Entities (That are not Skills)**

{

"named-Entities": [

{

"PER": ["SW Algorithms"],

"LOC": [

"Dublin"

],

"ORG": [

"Driving","Connectivity & Security"

]

}

]

}

NOTE, the Skill annotator gives you the annotations from Document, the client tool, needs to do a bit of post processing to derive that to the targeted application.