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Grupo: **Aprendizaje de maquina**

TALLER 1

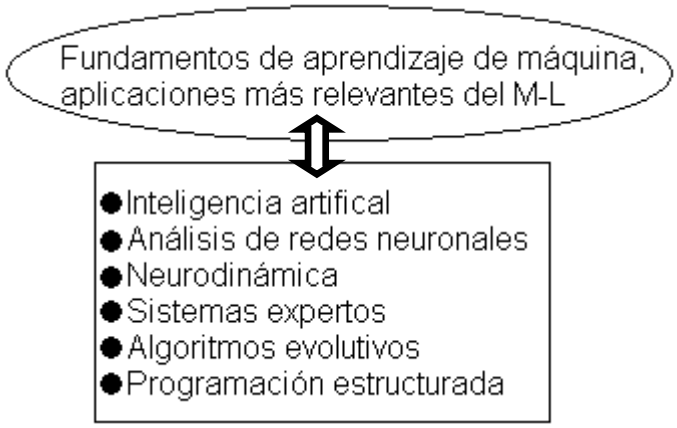
1. Sintetice su área de interés:

Aprendizaje de máquina. Esta área de las ciencias de la computación, busca aplicar en los computadores los principios biológicos que rigen el aprendizaje del ser humano, con el fin de hacer más eficientes los procesos informáticos.

2. Cuales son las áreas de la ciencia que trata el tema de interés.

Análisis de las redes neuronales, neuro-dinámica (Especificación de las reglas de aprendizaje o adaptación, según las cuales la red ajusta parámetros internos). Sistemas expertos, algoritmos y programación estructurada.

3. Realice un cuadro resumen de las áreas de la ciencia y su vinculación a su tema de interés:



4. Cuales son los principales autores a seguir en el trabajo y a que instituciones pertenecen.

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Chen, M.; Gautama, T.; Van Hulle, M.; Kuh, A.; Obradovic, D. & Mandic, D.
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5. Describa en un párrafo de máximo 10 líneas el tema a trabajar y el área científica en la cual usted cree podría hacer algún aporte.

El aprendizaje maquina tiene una gran importancia en el manejo de la herencia y en el estudio de la genética debido a que hay gran cantidad de caracteres ligados al sexo que pueden ser dominantes o recesivos, pero que en un determinado momento dada la combinación de los gametos femeninos y masculinos pueden originar seres perfectos o con diferentes mutaciones. El aprendizaje maquina hace uso de las redes neuronales y estas nos son útiles por ejemplo en un caso de reproducción humana que teniendo en cuenta las características de los dos sexos podemos predecir las posibles características que tendrán los hijos y así mismo evitar o corregir los diferentes errores que se puedan presentar en el ADN resultante.

6. En un párrafo de no más de 5 líneas, describa la idea de su trabajo:

Inicialmente, desde una recopilación de bibliografía sobre Machine Learning, se busca tener un concepto muy general pero suficiente sobre las aplicaciones más relevantes del Aprendizaje de máquina en Ciencias de la Computación, revisando también sin entrar en detalles, en qué se aplican concretamente las teorías de esta área.