Master Thesis - Machine intelligence algorithm for Automatic Bug Assignment in 5G

Background
Mobile networks are used all over the world and are the corner stone for the networked society, where everything shall be connected. To support the vast amount and diversity of data expected in future networks, Ericsson are developing products to drive and support the networked society. The subjects for Master Thesis are defined to investigate and develop algorithms, architecture, tools etc. to support huge increase of speech, data and massive IoT for Radio Access Networks.

Thesis Description
When a problem is discovered in the mobile network in Ericsson, a bug report is created. One of the first steps in the analysis when this happens is finding the correct team to investigate the issue. This analysis has previously been performed manually work, but today it is partly automated for 4G by running an AI algorithm.

The main goal of this master thesis is to adapt and improve the existing machine intelligence algorithm. These are the two main sub goals to achieve this:

• Investigate the modifications needed to use the current algorithm for 5G.

• Investigate if inclusion of more data into the algorithm can improve the result of the algorithm. This will be performed by using logs that exists in the database today but are not used by the algorithm.

The thesis will be concluded with a result presentation for the Ericsson team.

Qualifications
This project aims at students in electrical engineering, computer science, computer engineering or similar.

Extent
1-2 students, 30hp each

Location
Ericsson AB Mjärdevi, Linköping

Preferred Starting Date
Spring 2020

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