**STTI NIIT I-TECH**

**INFORMATION SYSTEMS BACHELOR DEGREE PROGRAM**

**JENDRO HARDIYANTO SUPRAPTO**

**411410021**

**PERANCANGAN DAN IMPLEMENTASI SISTEM PAKAR DIAGNOSA PENYAKIT TULANG BELAKANG BAGIAN PINGGANG BERBASIS WEB MENGGUNAKAN METODE FORWARD CHAINING**

# ABTRACT

The spine is a very important part of supporting the daily activities of every person, a very important part that supports the human body. In the era of development as now not many people still ignore the health of the body, especially the spine which does have an important role in human survival. From diet and habits to sit for long periods of time can be bad for the health of the spine. In this era of development the use of information technology plays an important role, with the presence of various systems or applications to help disseminate information, assist decision making and help provide conclusions. Expert system is one system that has been widely applied in various fields, including the health sector. A system that helps provide decisions with material in the form of several facts that will later be included and processed by the expert system. Expert system itself is a system that is provided with knowledge from one or several experts in a particular field. With the existence of an expert system in the field of health can help provide conclusions based on symptoms in the form of facts in the field.  
In research applying expert systems in the field of health, namely the spine. In the expert system itself there are many methods that can be used to do a search, one of which is the method used that is forward chaining. Forward chaining is tracking or tracking forward with data in the form of facts that will be used as data to draw conclusions. Based on the symptoms in the form of facts that act as data which will later be processed to get conclusions, so that the user can draw conclusions from the symptoms entered into the system.  
In this study the materials and sources needed are obtained from books and information from an expert in the spine field, namely a physiotherapist and a graduate of physiology medical school. As well as observations and experiences experienced by several sources with an average age of 18-25 years.  
This expert system website is designed using use case diagrams, activity diagrams and sequence diagrams. And it has been implemented using the PHP Native programming language, designed using the Bootstrap CSS framework and using MySQL as a database.

Keywords : perancangan, website, pakar, sistem pakar, php, penyakit, tulang belakang, diagnosa.