**SUMMARY INFORMATION ON NEW FINDINGS
IN DOCTORAL THESIS**

Thesis title: A Study on Semantic-Seeking Methods Using Ontology and Their Application to the Construction of a System of Searching for Diseased Samples

Major: Mathematical Foundation for Informatics

Major code: 9.46.01.10

PhD Student: Nguyen Hong Son Class: 34

Supervisor: Dr Duong Trong Hai; Dr Hoa Tat Thang

Educational institution: The Military Technical Institute

**The new findings of the research:**

The dissertation studied different methods of constructing a semantic searching system and their application to constructing a semantic system of searching disease-related information. This system will definitely bring effectiveness to search disease data while disease input is still lacking. The user-interactive and combination regulation-based processes will make better inference than in traditional processes. Major findings include:

1. Proposing a triple extracting method based on the syntactical model of deriving triples from textual data with a view to constructing textual characteristics.

2. Proposing a multi-facial method of textual data search and its customization using Wikipedia disambiguation.

3. Proposing a method of discovering combined regulations in Ontology (ASO-Apripori) based on two degrees of measurement: widened support and widened reliability and discovering semantically combined relationship regulations in Ontology.

4. Constructing Vietnamese ontology.

5. Proposing a method of constructing an semantic system of searching disease data with user-interactive support through hints based on arguments in combination with disease symptoms and semantic combination regulations in ontology

 *Ha Noi, date... month… year 2020*

 **Supervisor Phd Student**

Dr Duong Trong Hai; Dr Hoa Tat Thang Nguyen Hong Son