*On The Comparison of Distributed Programming Using Remote Procedure Call XML-RPC and Remote Method Invocation (RMI)*
*Case Study Matrix Operation on Image Processing*

***Abstraction***

*To make a complex program, programmers usually divide the program into some modules in order to ease to be understood, to be solved, and to be built. Each of functionality of the program is usually represented by a module. The comprehensive work of the modules build a complete function of the program itself.*

*Modularity concept of a program may give more than one advantages. One of them is that modularity concept enable programmers to build distributed programming. By using distributed programming, program's modules do not have to be in the same machine. These modules may be spread out in the computer nodes that are connected to the network. To enable them to communicate each other, a technology should be taken to bridge the connections among the modules. Technology such as socket, RMI (for Java), CORBA or Remote Procedure Call (RPC) may become the communication bridge among the modules.*

*In this Final Assignment, a distributed programming is built using Remote Procedure Call and* Remote Method Invocation. *Among many implementations of RPC, this Final Assignment use XML-RPC as it Remote Procedure Calls. The RMI program is implemented using Java RMI.*

*The result of the final assignment has shown that running distributed program under Java RMI is generally faster than distributed program under XML-RPC (on both Python and Java). However, XMLRPC with Java is relatively faster than Python.*

*Key Words: distributed programming, Remote Procedure Call (RPC), XML-RPC, Server, Client,* Remote Method Invocation*(RMI).*