

**TOWARDS A FRAMEWORK FOR TRUST NEGOTIATIONS
IN COMPOSITE WEB SERVICES**

by

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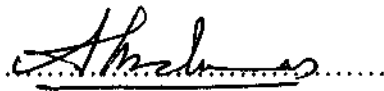
SUPERVISOR: PROF L. M. VENTER

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I declare that

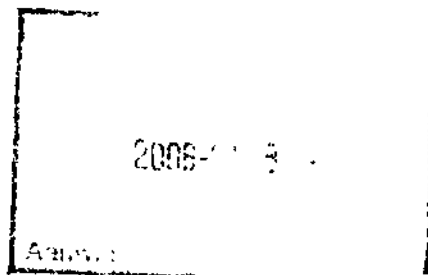
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WEB SERVICES

is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.



Anitta Thomas

20/03/06.



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ABSTRACT

Web Services propose a framework for the standardisation of interfaces and interaction, and for publishing software components as services on the Internet. By using this framework, composite services that make use of more than one Web service can be created. Although a composite Web service may provide a unified service to the service requestors, it cannot be viewed as a single unified entity when its trustworthiness is evaluated, since its constituent services may differ in their non-functional attributes.

Based on the context of trust (which includes security, reliability, quality of service, etc.), information has to be collected from the constituent services of a composite Web service. Trust negotiation is performed to gather information from these services, with the ultimate goal of establishing trust relationships with them.

In this dissertation, the Web Services framework is analysed to determine its support for trust negotiation in any trust context. A trust negotiation procedure is subsequently presented, which can be applied in a composite as well as an elementary Web service.