**“A PROTECTED AND VIBRANT MULTI-KEYWORD RANKED SEARCH SYSTEM OVER ENCRYPTED CLOUD DATA”**

***A Dissertation Submitted in partial fulfillment of requirement***

***for the award of degree in***

**MASTER OF COMPUTER APPLICATIONS**

**of**



**Visvesvaraya Technological University**

**By**

**AKSHATHA B V**

**(1AX15MCA72)**

**Under the guidance of**

**Prof. A.C.M.V Srinivas**



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**18thKM, Bannerghatta Road, Bengaluru -560083**

**June 2017**

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**INTERNAL GUIDE: EXTERNAL GUIDE:**

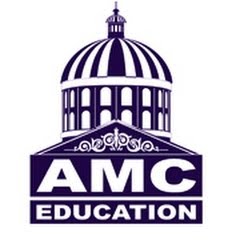
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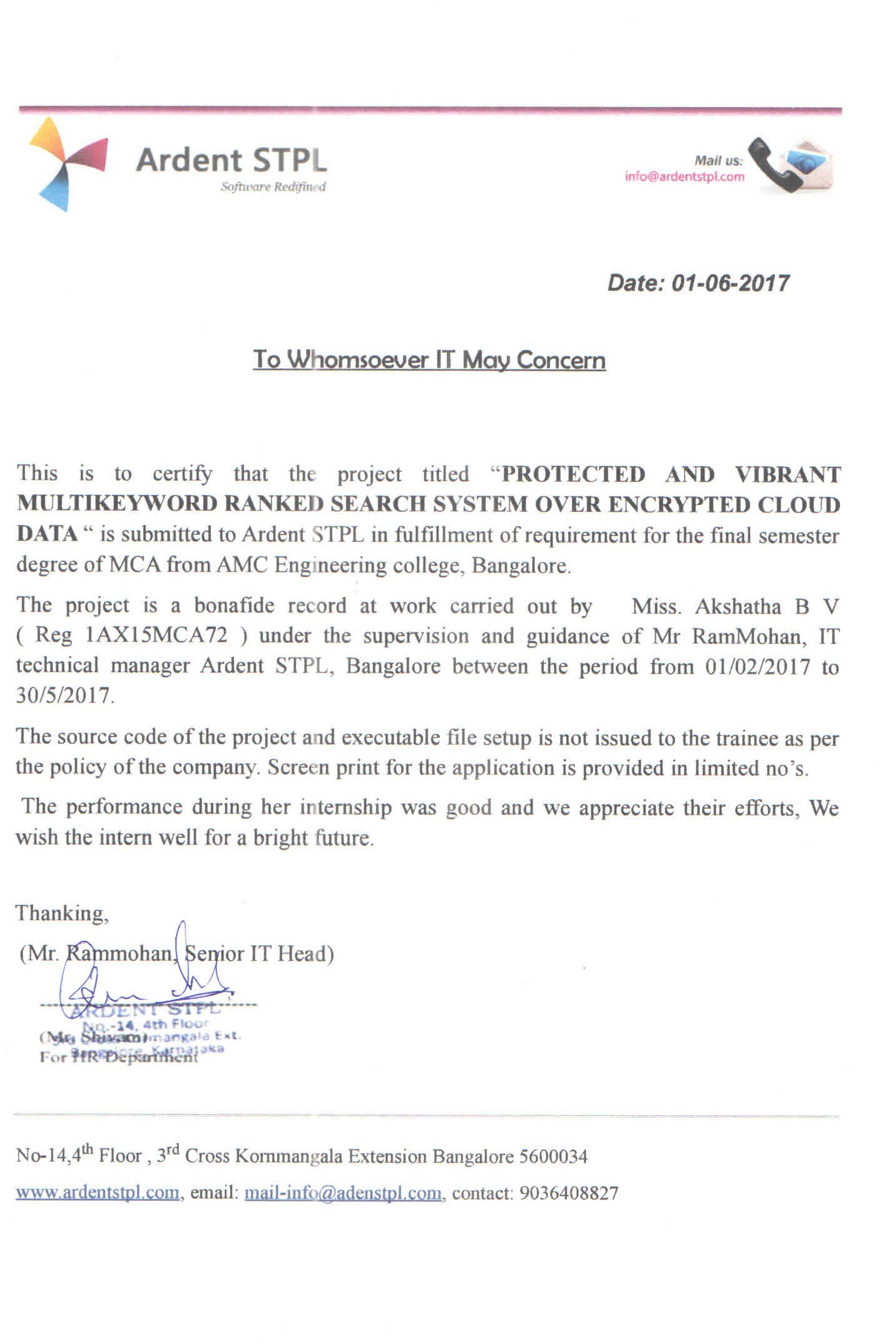
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**ABSTRACT**

Due to the increasing popularity of cloud computing, more and more data owners are motivated to outsource their data to cloud servers for great convenience and reduced cost in data management. However, sensitive data should be encrypted before outsourcing for privacy requirements, which obsoletes data utilization like keyword-based document retrieval.

In this project, a protected and vibrant multi-keyword ranked search system over encrypted cloud data, which simultaneously supports dynamic update operations like deletion and insertion of documents. Specifically, the vector space model and the widely used

TF x IDF model are combined in the index construction and query generation. We construct a special tree-based index structure and propose a “Greedy Depth-first Search” Algorithm to provide efficient multi-keyword ranked search.

Due to the use of our special tree-based index structure, the proposed scheme can achieve sub linear search time and deal with the deletion and insertion of documents flexibly.

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