

Intern Requirement

No. of students required	1-2
Preferred Discipline	<ul style="list-style-type: none">• Computer Science/Engineering• Electrical & Electronic Engineering
Prerequisites/ Skills Required	<ul style="list-style-type: none">• Advanced Java/C# programming• Basic web programming/administration• Knowledge of text mining and data storage solutions• Knowledge of object-oriented analysis and design principles• Knowledge of Info Retrieval (IR) techniques, and Natural Language Processing (NLP) techniques preferred

Project Details

Title	Open Framework Q&A System (Open Q&A)
Overview/Background	<ul style="list-style-type: none">• Information overload is a critical problem facing enterprises of today. The key to survivability depends on the organisational agility to respond to challenges. Staff nimbleness can be improved if the barrier to access key enterprise knowledge is reduced• Classic IR system attempts to solve this by surfacing the most relevant document to a particular query. However, valuable time is wasted to uncover relevant pieces of information among the top search results• To further exacerbate the problem, the relevancy of the documents returned is very much dependent on the quality of query used and may differ from user to user• Question and Answering (Q&A) systems are designed to overcome the above by allowing users to ask natural language questions (instead of keywords) and suggest possible answers. It would narrow the gap in Human-Computer Interface and allow us to stretch the capability of our computer system by posing even more complex query to our content management system• QA machines will be a major breakthrough in enterprise perennial battle with the information overloading problems
Objectives/Scope/ Deliverables	<ul style="list-style-type: none">• The main objective of this project is to evaluate the viability of a Q&A system using an open framework to combine state-of-the-art technologies and techniques• The intern will propose the overall design of the Q&A system architecture. In addition, the intern will also evaluate and improvise on existing open framework modules e.g. POS Tagger, Entity Extractor, Search Engine, etc. by replacing them with commercial equivalents to meet unique organization needs and requirements• The final delivery shall be a web interfacing application to a modified variant of a factoid Q&A system• This project will equip the intern with advanced information retrieval and natural language processing techniques, and the knowledge to discern the pros and cons of each approach
Project Duration	2-4 months