Master Thesis Proposal

Search Quality Evaluation for Continuous Integration Tools

Company Profile
Sease mission is to make research in Information Retrieval more accessible to an industry audience, transforming the best research principles, ideas and implementations from academia into real world products.
Focus of the company is to provide R&D projects guidance and implementation, search consulting services and training using open source software such as Apache Lucene/Solr and Elasticsearch.

Introduction:
Every search engineer ordinarily struggles with the task of evaluating how well a search engine is performing.
Rated Ranking Evaluator (RRE) is a search quality evaluation tool that queries a target search engine and produces a report with state of the art evaluation metrics.
Ideal application is within a continuous integration infrastructure to continuously monitor your system, deployment after deployment.

Thesis
Focus of the Thesis is to design and implement a set of plugins for well known continuous integration tools to integrate RRE-Enterprise to a company devOps ecosystem.

Requirements: Students enrolled in the master degree in Computer Engineering have the priority + Course of Information Retrieval

Main responsibility of the candidate will be to:
• learn basic concepts of Agile methodologies for software engineering
• get familiar with Apache Lucene based search engines (Apache Solr/Elasticsearch)
• learn details of Search Quality Evaluation
• grasp the fundamentals of Continuous Integration and Continuous Deployment through well established industry level technologies
• design and implement plugins for Apache Jenkins, Atlassian Bamboo and JetBrains TeamCity

Location: no requirements in terms of working hours or location, the student can work flexibly from its own premises or at the University Labs

Duration: 5/6 Months
Period: from October to February/March

Benefits: Expenses + a paid visit to London for an Information Retrieval meetup