

**Name:**

**Major:** Computer Science

**Course:** ECS 192. 4 units, Winter 2013

**Instructor:**

### **Internship at Splunk**

**Background:** Splunk is a company that enables organizations to index large amounts of time series machine data and draw meaningful conclusions from their data sources. As an example, Splunk can be used to index anything from the Twitter Firehose (all “tweets” as they are sent) to server logs in a datacenter. Splunk Enterprise is the on-premise solution that is used by large corporations or teams within a company. A large amount of resources are required to maintain a Splunk installation, which is why small developers and startups require a solution that gives them a Splunk instance without the cost of Splunk Enterprise. Splunk Storm is web application intended to deliver the power of Splunk in a form that will allow users to index their data without concern for a larger Splunk installation.

**Objectives:** My time at Splunk will be split between working on the web application code and monitoring infrastructure of Storm. Development of the web application code will involve designing, coding and testing new features of Storm that will extend functionality for the end users. Since Storm is a web application that runs across several machines, a monitoring system must be in place to ensure all aspects of the service are running as expected. For example, we want to ensure that the database server is reachable and operational. I will be working with senior engineers to create a prioritized list based on what particular details of the servers need to be watched.

**Goals:** During my internship at Splunk, I hope to learn more about working at a real world software company, and how web applications are engineered for maximum uptime and performance. My overarching goal would be to see how software engineering is being adapted to the relatively new field of web applications.

**Plan:** When beginning any new work, I will discuss my implementation approach with senior engineers to learn more about the structure of the server code and how it can be modified efficiently. On the Storm team, all engineers are required to unit test their code. Once my code is complete, I will work with QA engineers to integrate and test my work with the existing code base. Real world software is supposed to be very robust, so I expect to learn more about what it means to ship tested code. For new features, I will also be working with a Product Manager to assess the needs of our end users to find out what they want next on Storm. Working on the Storm team will involve interacting with a number of different engineers that specialize on various aspects of the software engineering lifecycle.