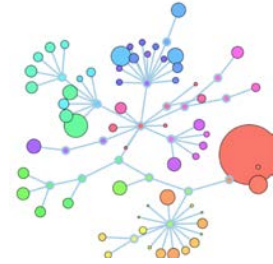# Newmont Instant Visualization

Proposal for Colorado School of Mines MCS Field Session, Summer 2014

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## Introduction

We are in a renaissance period for data visualization. This is being driven by the widespread availability of massive datasets coupled with tools such as D3.js that allow a developer or artist to convey information in new and engaging ways. See for example work by Mike Bostock, Nathan Yau, and Edward Tufte. While many of the tools (and ideas) are in-place, applying them to you own data can be tedious, and is often beyond the means of many computer users. As such, Newmont would like to develop an "Instant Visualization" tool that would allow you to instantly render information in new and creative ways.

## Objectives

1. Explore visualization tools, leading candidates are D3.js, R, and Python.
2. Develop data mining tool(s) to scrape data from websites or other sources.
3. Apply analytics to determine the best way to visualize different datasets such that the default "first guess" is very good, potentially learn from an individuals preferences.
4. Develop visualizations that are both interactive, allowing you to drill into more detail, and also transformative to trial different views of the information.

## Requirements

1. Interest in "big data", visualization, and analytics.
2. Passionate (or at least curious) about Open Source.
3. Communication skills.

## Work Environment

The work environment and location are flexible. Anticipate a number of face-to-face meetings and frequent electronic communication as a minimum.