Hardware Control from the Internet (IoT)

*_Paid internships_* after Field Session will be offered to students that perform well. Assuming your software works, each student will also receive a personalized inscribed mug.

Client

David Flammer, Datava.com, david@datava.com

Background

Datava develops enterprise level resource management and business intelligence tools. A growing need for businesses is controlling and monitoring their hardware resources from the cloud. We are partnering with Purakal Cylinders, Inc. to develop hardware control systems in our cloud-based platform. This enables remote tracking of hardware usage and immediate deployment of control systems to tablets, smart phones, or any other computer.

Project Goals and Requirements:

You will develop a web-based control system for a laser marking system (shown to the right) to help streamline the management of this machine. If time permits, you will develop the software to integrate with a QR scanner (to scan jobs in to be marked) and a signature pad (to sign that work has been completed).

Suggested team size and location:

3-4 students

Work can be done from CSM campus or elsewhere (connecting to our remote dev environment) or at our offices in Westminster, CO.

Skills/Experience for CSM Students:

Students will learn about integrating hardware to software over a network. This includes networking (and some security related issues), web development, database development, as well as understanding the nuances of hardware control.

- Remote control of hardware over TCP/IP interface
- Web development of user interfaces: Javascript/AJAX, PHP, SQL, version control.

Note: All intellectual property developed as part of this project will be owned by Datava, Inc.