Automated Web App Packaging and Deployment (Docker, et al.)

**Paid internships** after Field Session will be offered to students that perform well**.**

Client

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Background

Datava develops enterprise level resource management and business intelligence tools. We are going to begin to "containerize" some web applications for two reasons: internal deployment and publishing software for deployment to outside systems. Tools such as Docker or Kubernetes have made this much simpler (and scalable) than it used to be. Another method is using Virtual Machine Appliances (possibly more secure but also more complicated).

Project Goals and Requirements:

You will determine an appropriate containerization/deployment strategy (most likely using Docker) for our web application, build it, and deploy/test it to a few different environments. One factor will be maximizing the target operating systems/configurations to which our systems can be deployed. Installation scripts and documentation for installation (for example, setting up network interfaces so the container can communicate with the outside world) must also be developed. As part of the project, the application must also be prepared for packaging, including some securing of source code.

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 modern containerization and software deployment methodologies, including tools such as:

- Docker
- Kubernetes
- VMWare

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