SQL Connector/Translator

Paid internships after Field Session will be offered to students that perform well**.** These often extend into the school year, and after graduation turn into full-time positions.

Client

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Background

Datava develops enterprise level resource management and business intelligence tools. Much of what we do centers on building tools to manage databases. The majority of the corporate world uses SQL databases, such as PostgreSQL, MySQL, MSSQL and Oracle; because of the ubiquitous nature of SQL, even non-SQL based databases offer SQL interfaces to interact with them. However, there is a fair amount of variation in implementation, particularly when it comes to database design: table definitions, constraints, indexing, etc. Dealing with these differences is the focus of this project.

Project Goals and Requirements:

Datava has a database abstraction layer that can connect to different database types. You will build a connector for this layer to PostgreSQL, and build out some translation tools to translate between PostgreSQL and other SQL variants (to facilitate a transpiler: you can write a query in one variation and will get queries in another variation).

Suggested team size and location:

3-5 students

Work can be done from CSM campus or elsewhere (connecting to our remote dev environment) or at our offices in Golden, CO (about 10 minutes from campus).

Skills/Experience for CSM Students:

We'll team you up with one of our interns that previously came through field session at CSM to mentor you through the project.

Students will come out of this project with a deep understanding of databases in general, as well as specific variations between different database implementations. In particular, you will use and understand the following languages:

- PostgreSQL
- MySQL
- MS Transact-SQL
- PHP

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