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Computer Science Apprentice Position

BACKGROUND: The NWIRC is a non-profit management consultancy of the U.S. Department of
Commerce and the Pennsylvania Department of Community and Economic Development that assists in the health and vitality of manufacturing businesses in the Northwest Pennsylvania region. Our client, U.S. Bronze Foundry and Machine, Inc. are manufacturers of custom designed produced products including bearings, liners, bushings and wear items. Each product is produced specific to the needs of the customer.

OBJECTIVES: The qualified apprentice will help decrease the labor needed to support quote generation, product definition and plant operations, it is desirable to produce an automated system capable of defining the products, the processes necessary to produce them and the estimated costs associated with production. The responsibilities will include:

1. Develop flow charts, decision trees and/or pseudo-code documents describing the logic used to define a product, as well as the operations and materials necessary to produce it. The parameters necessary to fix this methodology will be provided by the process owner at the company.
2. Utilizing DriveWorks, a solid modeling automation software engine, develop a UI which allows the process owner to input the necessary parameters to define the product or duplicate a previous entry.
3. Using the inputs given by the user, automate the creation of documents and database entries necessary to define, produce and cost-estimate the product.
4. Utilizing Microsoft SQL Server, store the inputs and outputs of the process for future reuse or data mining applications.

REQUIREMENTS: Candidates are required to be currently enrolled in an accredited college or university, and shall be pursuing a four-year degree in IT, CS, Computer Engineering or related degree; and ability to work at the Meadville, PA facility. Knowledge of functional and object oriented programming principles. An understanding of basic relational database principles, e.g. primary key, indexing, relationships. Familiarity with functionality of some SQL statements, specifically SELECT, INSTER, UPDATE, and DELETE. Proficiency in mathematics up to and including trigonometry and geometry. Working knowledge of Microsoft office, especially Excel.

TIMEFRAME: May 2016 through August 2016.

CONTACT: Qualified candidates are to apply online at www.nwirc.org/apprentice. Please direct all inquiries about this advanced manufacturing opportunity, including requesting a further detailed description of essential job function, to Gretchen Reinard via email greinard@nwirc.org.