**IT FUTURES SUMMIT 2018**

**Machine Learning Presentation**

**Presentation Preview: Sylvia Unwin, Programming Chair, Assistant Dean for the Institute of Business and Information Technology**

**Bellevue College, Bellevue, Washington**

*Transforming Data with Intelligence (TDWI) Accelerate Conference*

*Seattle, Washington*

*October 2017*

[The Fastest Path to Achieving Your Analytics Goals](https://tdwi.org/events/accelerate/seattle/information/agenda.aspx)

**Topics to be Covered:**

Seminars attended included:

* Machine Learning, using Python
* Data Visualization tools
* Market Basket Analysis
* Various techniques (statistical algorithms) and in which areas they would best apply
* In-depth descriptions on data mining techniques and when to use them
* Speakers presented case studies of current businesses that use these techniques to make data-driven decisions with data visualization, data mining and data integrity.

**Overall Presentation Preview:**

* Focus on the solution when trying to incorporate AI into your business
* Understanding the various statistical techniques and using python to program machine learning with panda, scikit-learn, anaconda, (jupyter notebook), scipy and pattern recognition. Definitely teachable moments in a machine-learning class/programming class.
  + Regression
  + Classification
  + Clustering
* Data Visualization as an art form (pros and cons)
  + The user experience consideration
  + Interactive data analysis
* Big Data to Data Mining to Machine Learning and AI (data mining techniques)
  + Associations
  + Sequences
  + Classifications
  + Forecasting

**Will Conclude With:**

Networking was a valuable item of interest. The ability to talk with employees of various companies in what tools they used, languages used for programming and what skills were important. From these encounters, one could discern if Washington State IT programs are on the right path, or if there were updates that needed to be considered.

For the start of a Robotics and AI programs, the initial belief is it is moving on the right path. Soft skills of critical thinking, problem solving, working as a team, and being creative (in design) techniques, are also important.