Mike Nelson Skills, Tools, Languages and Frameworks

Languages: Python and Java (and Minimal C and C++)

Fall 2020 – Ongoing

Compose code using an editor and a compiler/interpreter to write and execute programs in a programming language that implement given requirements. (IDLE, PyCharm, and IntelliJ)

Implementation of data types, variables and constants, and use assignment, arithmetic and boolean expressions in writing programs.

Comprehend and implement basic selection and repetition control structures.

Use one and two-dimensional arrays and structures.

Employ object-oriented techniques including hierarchy, abstraction, encapsulation, and polymorphism in program development.

Compose event driven GUI programs that implement given specification.

Troubleshooting and debugging including unit-testing, failure analysis, fault isolation, run-time exception handling, resolving application dependencies, version control, and compiler errors including those that are not line specific.

Data Science Applications:

SQL:

Offer performance tuning, refactoring, and design skills.

Implementation and understanding of relational theory.

Employ set theory

RStudio:

Implementation of vectors, and running a high number of simulations for probability and modeling.

Data Wrangling - convert the data which is messy to the data form which is good for analytics, visualization, modeling, etc.

Data Visualization – create meaningful graphics and presentations to convey info to target audience

Data Manipulation – summarize, subset, and rearrange data as needed.

Tableau:

Basic Data Comprehension. ...

Data Modelling & Transformation. ...

Math & Statistical Analysis. ...

Analytical & Visualization Skills. ...

Filtering, Sorting and Grouping.

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Excel and CSV:

7 years of working experience estimating with heavy use of Excel

Broad knowledge of functions, macros, and pivot tables

Formatting, graphing, visualization and reporting

Web Formatting: CSS and HTML

Implement CSS stylesheets (crispyforms when available) and attractive features like:

Hover effects

Resize images to fit a div container

Override styles

Using single-line property declaration

HTML tags and editing for web and mobile applications

Nesting, multiple quotes, and character handling

Django Web App Framework:

Confident with Python and the Django framework.

Event-driven programming as well as the MVC.

Use of REST APIs

Beginner Mobile App Design:

Kotlin and java programming basics and template use

Understand and implement XML

Comfort and skill using Android Studio

Implement SDKs for faster and organized app development