

Excel Analytics and Programming

Fall 2012 Workshop

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Goals of the Workshop



- Learn Excel tools by utilizing them in various cases
 - Tools and materials covered here are merely a sample of Excel functionality
- Understand the logic and syntax behind Visual Basic programming, which interacts with the Excel interface
 - No programming background required
- Create dynamic algorithms to approach cases
 - When data is changed, but retains its original format, the algorithm should be able to automatically handle the transition appropriately

Workshop Structure

- Instead of providing function and programming syntax to memorize, this workshop emphasizes case studies, through which the skills are utilized
 - Cases: applicable situational tasks
 - Tutorials: supplemental teaching material to understand foundational materials
- Best recommended to follow along and do the exercises with accompanying spreadsheets

Workshop Resources

www.georgegzhao.com/excel.html

Lesson materials:

- Learning Slides[.pdf]
- Exercises - Blank [.xlsx]
- Exercises - Filled [.xlsm]

Contents Overview

- Case 1: Multiplication Table
- Case 2: Percentile Calculations
- Tutorial 1: Variables and Arrays
- Case 3: Hello World
- Tutorial 2: Functions
- Tutorial 3: Loops and Decisions
- Case 4: Gradebook Tallying
- Case 5: Loop through Data
- Tutorial 4: Recording Macro
- Case 6: Select, Pull, Display
- Tutorial 5: Userform
- Case 7: Subway Data All-Around Analysis

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