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**Prepare for Class 5** 09 / 27 /22

Hadley Wickham: EMBL Keynote Lecture - Data visualization and data science

**Summary** 

Mr. Wickham's lecture discussed his approach to data visualization and data science. The first concept

introduced was that of data reshaping. This is the process of obtaining and then manipulating data into

a tidy usable variable / observation format. Data then most often must be transformed through

aggregation and summarization. Visualization is the process of mapping the variables in your dataset

and the things that are perceivable by people. This can be done in an iterative way that layers

components of the variables into visual frameworks. Conducting visualization in this iterative way

allows for the development of an exploration of the data ultimately concluding in a final polished

graphic. Iteration also allows the designer to balance the trade-offs between different visual and

perceptual concerns. In this process, Mr. Wickham suggests that programming is key to the process.

Programs allow for the transfer of visualizations between different datasets. Programming also

documents the approach that is readable to other users.

References

emblmedia. 2019. "EMBL Keynote Lecture - Data Visualization and Data Science, Hadley Wickham."

YouTube. https://www.youtube.com/watch?v=9YTNYT1maa4 (September 22, 2022)...