**Lesson Recap** 



SEARCH	Q
RESOURCES	<b>A</b>
CONCEPTS	

- ✓ 6. GMM in 2D
- ✓ 7. Quiz: Gaussian Mixtures
- ✓ 8. Overview of The Expectation M...
- 9. Expectation Maximization Part 1
- 10. Expectation Maximization Par...
- √ 11. Visual Example of EM Progress
- ✓ 12. Quiz: Expectation Maximization
- 13. GMM Implementation
- ✓ 14. GMM Examples & Applications
- ✓ 15. Cluster Analysis Process
- 16. Cluster Validation
- ✓ 17. External Validation Indices
- ✓ 18. Quiz: Adjusted Rand Index
- ✓ 19. Lab: GMM & ARI
- 20. Lab Solution: GMM & ARI
- 21. Internal Validation Indices
- 22. Silhouette Coefficient
- ✓ 23. Lab: GMM & Silhouette
- 24. Lab Solution: GMM & Silhouet...
- 25. Lesson Recap



Congratulation on completing this lesson on Gaussian Mixture Model clustering and cluster validation. You can now:

- Cluster data with Gaussian Mixture Models
- Optimize Gaussian Mixture Models with Expectation Maximization
- Understand the cluster analysis process
- Evaluate results using cluster validation

You've learned to visualize your findings and interpret your results using the scikit-learn library and your own mathematical equations. Way to go!

## **Looking Ahead**

In the next lesson, you will learn to refine your models using unsupervised learning techniques that transform your data instead of clustering. You'll also learn how to reduce the number of features in your dataset down to those that are most important for the questions you need to be answered.