


Collapse all

▼ Career Services: Creating the Optimal Technical Resume

  [Register for Career Prep](#)

  [Examples of Resumes by Discipline](#)

 [Key Elements of your Resume](#)

 [Resume Assignment](#)
4 pts

▼ Week 1: K-Nearest Neighbor Algorithm

Complete all items



 [Welcome to Phase 4](#)

 [K-Nearest Neighbors - Introduction](#)
Viewed



 [Distance Metrics](#)
0 pts Viewed



 [Distance Metrics - Lab](#)
0 pts Viewed



 [K-Nearest Neighbors](#)
Viewed


















 [K-Nearest Neighbors - Lab](#)
0 pts Viewed














 [Finding the Best Value for K](#)
Viewed





	<u>KNN with scikit-learn</u> Viewed	✓
	<u>KNN with scikit-learn - Lab</u> 0 pts Viewed	✓
	<u>Quiz: K Nearest Neighbors</u> 1 pts	
	 <u>Nonparametric ML Models - Cumulative Lab</u> 1 pts	
	<u>Data Ethics - Case Study FairKM</u> Viewed	✓
	<u>K-Nearest Neighbors - Recap</u> Viewed	✓

















▼ Week 1-2: Model Tuning, Pipelines, & Ensemble Methods		Complete all items
	<u>Model Tuning and Pipelines - Introduction</u> View	<input type="radio"/>
	<u>GridSearchCV</u> View	<input type="radio"/>
	<u>Introduction to Pipelines</u> View	<input type="radio"/>
	<u>Pipelines in scikit-learn - Lab</u> 0 pts View	<input type="radio"/>
	<u>Refactoring Your Code to Use Pipelines</u> 0 pts View	<input type="radio"/>
	 <u>Short Video: Pipelines</u> View	<input type="radio"/>
	<u>Model Tuning and Pipelines - Recap</u> View	<input type="radio"/>






	<u>Ensemble Methods - Introduction</u> View	<input type="radio"/>
	<u>Ensemble Methods</u> View	<input type="radio"/>
	<u>Random Forests</u> View	<input type="radio"/>
	<u>Tree Ensembles and Random Forests - Lab</u> 0 pts View	<input type="radio"/>
	<u>GridSearchCV - Lab</u> 0 pts View	<input type="radio"/>
	<u>Gradient Boosting and Weak Learners</u> View	<input type="radio"/>
	<u>Gradient Boosting - Lab</u> 0 pts View	<input type="radio"/>
	<u>XGBoost</u> View	<input type="radio"/>
	<u>XGBoost - Lab</u> 0 pts View	<input type="radio"/>
	<u>Quiz: Ensemble Methods</u> 1 pts	
	<u>Ensembles - Recap</u> View	<input type="radio"/>








▼ Week 2: Recommendation Systems & Clustering















Complete all items

	<u>Recommendation Systems - Introduction</u> View	<input type="radio"/>
	<u>Introduction to Recommendation Systems</u> View	<input type="radio"/>

	<u>Collaborative Filtering with Singular Value Decomposition</u> 0 pts View	<input type="radio"/>
	<u>Matrix Factorization with Alternating Least Squares</u> 0 pts View	<input type="radio"/>
	<u>Implementing Recommendation Engines with Surprise</u> 0 pts View	<input type="radio"/>
	<u>Implementing Recommender Systems - Lab</u> 0 pts View	<input type="radio"/>
	<u>Quiz: Recommendation Systems</u> 1 pts	
	<u>Recommendation Systems - Recap</u> View	<input type="radio"/>
	<u>Clustering - Introduction</u> View	<input type="radio"/>
	<u>K-means Clustering</u> View	<input type="radio"/>
	<u>K-means Clustering - Lab</u> 0 pts View	<input type="radio"/>
	<u>Hierarchical Agglomerative Clustering</u> View	<input type="radio"/>
	<u>Common Problems with Clustering Algorithms</u> View	<input type="radio"/>
	<u>Hierarchical Agglomerative Clustering - Codealong</u> 0 pts View	<input type="radio"/>
	<u>Semi-Supervised Learning and Look-Alike Models</u> View	<input type="radio"/>
	<u>Quiz: Clustering</u> 1 pts	
	 <u>Short Video: Calculating a Silhouette Coefficient</u> View	<input type="radio"/>

	<u>Principal Component Analysis in scikit-learn</u>	0 pts	
	<u>Principal Component Analysis in scikit-learn - Lab</u>	0 pts	
	<u>Integrating PCA in Pipelines - Lab</u>	0 pts	
	<u>Market Segmentation with Clustering</u>	View	<input type="radio"/>
	<u>Market Segmentation with Clustering - Lab</u>	0 pts View	<input type="radio"/>
	<u>Clustering - Recap</u>	View	<input type="radio"/>


















▼ Week 2 - 3 : Natural Language Processing			Complete all items
	<u>Natural Language Processing - Introduction</u>	View	<input type="radio"/>
	<u>NLP and Word Vectorization</u>	View	<input type="radio"/>
	<u>Word Vectorization - Lab</u>	0 pts View	<input type="radio"/>
	<u>Introduction to NLP with NLTK</u>	View	<input type="radio"/>
	<u>Introduction to Regular Expressions</u>	View	<input type="radio"/>
	<u>Regular Expressions - Codealong</u>	0 pts View	<input type="radio"/>
	<u>Short Video: The Bag of Words Model</u>	View	<input type="radio"/>









	<u>Feature Engineering for Text Data</u> View	<input type="radio"/>
	<u>Corpus Statistics - Lab</u> 0 pts View	<input type="radio"/>
	<u>Context-Free Grammars and POS Tagging</u> View	<input type="radio"/>
	<u>Context-Free Grammars - Codealong</u> 0 pts View	<input type="radio"/>
	 <u>Short Video: TF-IDF Vectorization</u> View	<input type="radio"/>
	<u>Text Classification</u> View	<input type="radio"/>
	<u>Quiz: Natural Language Processing</u> 1 pts	
	 <u>Text Classification - Cumulative Lab</u> 1 pts	
	<u>Data Ethics - NLP Data</u> View	<input type="radio"/>
	<u>Data Ethics - Case Study: NLP Spacy Prodigy</u> View	<input type="radio"/>
	<u>Quiz: Data Ethics and NLP Data</u> 1 pts	
	<u>Natural Language Processing - Recap</u> View	<input type="radio"/>

▼ Week 3 : Neural Networks





Complete all items

	<u>Neural Networks & Pipelines - Introduction</u> View	<input type="radio"/>
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	<u>Gradient Descent in 3D</u> 0 pts View	<input type="radio"/>
	<u>The Gradient in Gradient Descent</u> View	<input type="radio"/>
	 <u>Short Video: The Gradient</u> View	<input type="radio"/>
	<u>Introduction to Neural Networks</u> 0 pts View	<input type="radio"/>
	<u>Introduction to Neural Networks - Lab</u> 0 pts View	<input type="radio"/>
	<u>Quiz: NN - Neural Network Architecture</u> 1 pts	
	<u>Scalars, Vectors, Matrices, and Tensors - Code Along</u> 0 pts View	<input type="radio"/>
	<u>Introduction to Keras</u> 0 pts View	<input type="radio"/>
	<u>Keras - Lab</u> 0 pts View	<input type="radio"/>
	<u>Quiz: NN - Tensors & TensorFlow</u> 1 pts	
	 <u>Short Video: Regression with a Neural Network</u> View	<input type="radio"/>
	<u>Neural Networks - Recap</u> View	<input type="radio"/>
	<u>Tuning Neural Networks with Normalization, Evaluation, and Regularization - Introduction</u> View	<input type="radio"/>
	<u>Deeper Neural Networks</u> 0 pts View	<input type="radio"/>
	<u>Deeper Neural Networks - Lab</u>	

0 pts	View	<input type="radio"/>
	<u>Tuning Neural Networks with Normalization</u> View	<input type="radio"/>
	<u>Tuning Neural Networks with Normalization - Lab</u> 0 pts View	<input type="radio"/>
	<u>Quiz: NN - Network Evaluation</u> 1 pts	
	<u>Tuning Neural Networks with Regularization</u> View	<input type="radio"/>
	<u>Tuning Neural Networks with Regularization - Lab</u> 0 pts View	<input type="radio"/>
	<u>Tuning and Optimizing Neural Networks - Lab</u> 0 pts View	<input type="radio"/>
	<u>Quiz: NN - Network Regularization</u> 1 pts	
	<u>Tuning Neural Networks - Recap</u> View	<input type="radio"/>

▼ Week 3 - Week 4: Model Interpretability[Complete all items](#)

	<u>Machine Learning Interpretability - Introduction</u> View	
	<u>Quiz: ML Interpretability 1</u> 1 pts	
	<u>Machine Learning Interpretability - White-Box Models</u> View	
	<u>Quiz: ML Interpretability 2</u> 1 pts	

**Interpreting White-Boxes: Building a Decision Engine**[View](#)**Machine Learning Interpretability - Black Box Models**[View](#)**Explaining Black-Boxes: Neural Networks**[View](#)**Quiz: ML Interpretability 3**

1 pts

**Machine Learning Interpretability - Recap**[View](#)

How do you feel about this lesson?



Have specific feedback?

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