



United States & Co-Plaintiff States v. Google LLC

Dr. Chris Culnane

Ex. No.

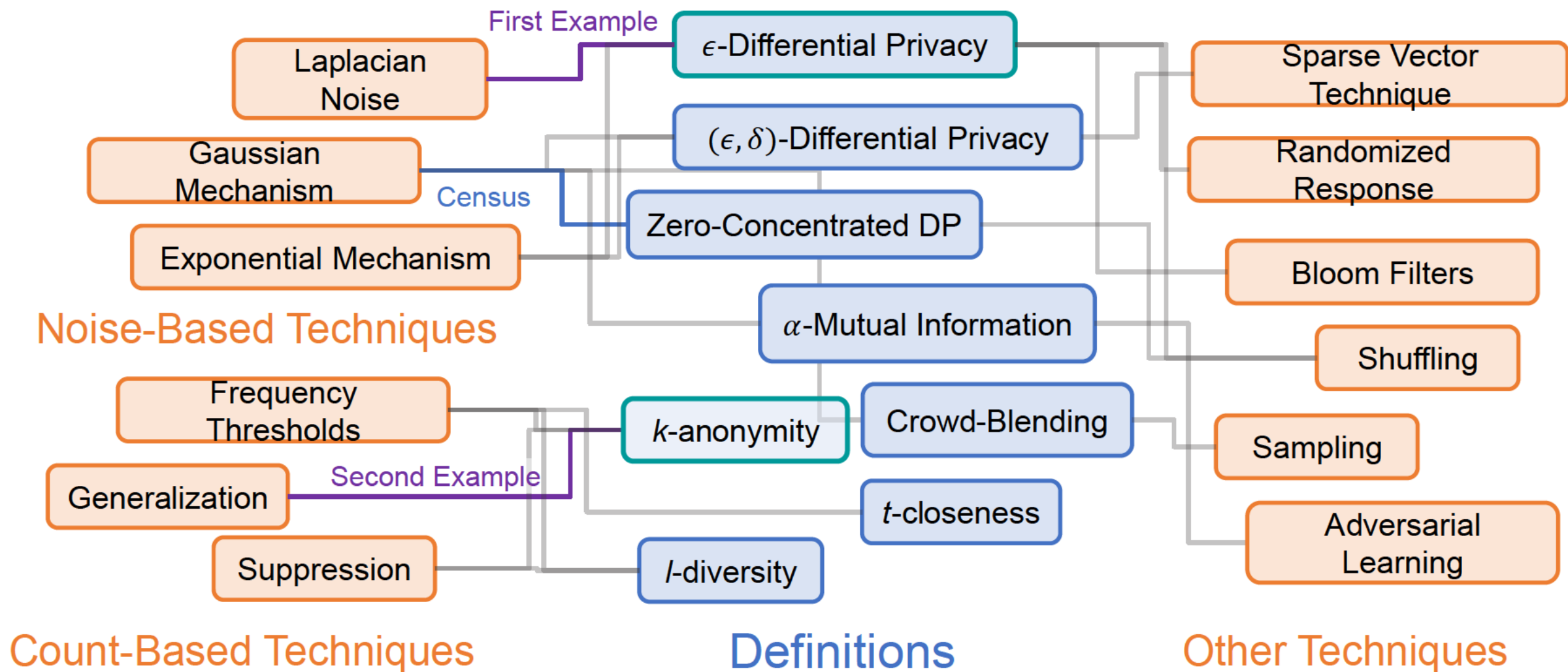
PXRD023

1:20-cv-03010-APM

1:20-cv-03715-APM








Many Formal Privacy Definitions and Principled Techniques





Dr. Culnane's Basis For Frequency Threshold Opinion

	Dr. Culnane's DMA Submission	Dr. Culnane's DOJ Reports
Use Case Analysis		
Empirical Utility Analysis		
Empirical Privacy-Enhancing Technique (PET) Analysis	Only Frequency Thresholding	



Query Generalization Techniques Used by Google

Spelling
Correction
& Query
Rewriting



Query Intent: Taylor Swift's Birthday