Contents

[Introduction](#_Toc497720950) 1

[Secondhand Lenses 33](#_Toc497720958)

[Requirements 42](#_Toc497720960)

[System 48](#_Toc497720962)

[Business 59](#_Toc497720962)

[Streaming Data 68](#_Toc497720950)

[MQTT Protocol 72](#_Toc497720951)

[Kafka 94](#_Toc497720952)

[Metadata Injection](#_Toc497720955) 138

[Standard 144](#_Toc497720956)

[Push / Pull 150](#_Toc497720958)

[2-Phase 168](#_Toc497720960)

[Filters 175](#_Toc497720956)

[Scaling your Enterprise Solution 199](#_Toc497720955)

[Carte Clusters 200](#_Toc497720956)

[Stream Partitioning 227](#_Toc497720958)

[PAN & KITCHEN 233](#_Toc497720960)

[Scheduling 239](#_Toc497720956)

[Checkpoints 255](#_Toc497720960)

[Transactional Transformations 266](#_Toc497720956)