

Platform scenario and sandbox topics

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On our radar















.NET

- Deploy ASP.NET Core as Docker Container
- .NET Sandbox
- C# Next Steps: Looping and Collections
- C#: Build and Run Console Apps
- C# Next Steps: Methods
- C#: Data Types, Variables, and Constants
- C# Next Steps: Interfaces and Inheritance
- C#: Class and Structs
- C#: Working with Strings
- C#: Looping and Arrays
- C# Next Steps: Classes and Objects
- C# Next Steps: Logic and Conditionals

Adobe design tools

Edge Detection Using Gradients

Algorithms

Get Started with Hashcat

Auditing and risk management

Value at Risk and Its Application with Python

C++

C++ Sandbox

Calculus

Simulating Geometric Brownian Motion

Cloud computing

- Cloud Native Data: Materialized Views
- Cloud Native Data: Data Partitioning

Computer vision

- Training a Dense Neural Network
- Training a Single Layer Model
- Face Detection Using OpenCV
- Loading and Preparing the Fashion MNIST Data
- Hough Transform for Lines and Circles
- Early Stopping to Save Time and Processing Power

Container orchestrators

- Launch a Single Node Kubernetes Cluster
- Kubernetes Fundamentals: First Kubernetes Application
- Kubernetes Pipelines: Helm
- Get Started with Networking on Kubernetes
- Deploy Microk8s on Ubuntu
- Create Kubernetes Ingress Routing



Container orchestrators (cont.)

- Kubernetes Observability: Basics
- Deploy Containers to Kubernetes Using Kubectl
- Kubernetes Containers: Go Apps in Containers on Kubernetes
- Kubernetes Applications: Nginx
- Kubernetes Containers: Decomposing Container Images
- Kubernetes Fundamentals: Minikube
- Kubernetes Fundamentals: Spring Boot to Kubernetes
- Kubernetes Fundamentals: Kubernetes Logs
- Kubernetes Observability: Scaling Your Applications, Automatically
- Kubernetes Fundamentals: Jobs
- Kubernetes Fundamentals: Kubernetes API
- Deploy a Virtual Kubelet
- Deploy Guestbook Web App Example on Kubernetes
- Kubernetes Fundamentals: ConfigMaps and Secrets
- Kubernetes Applications: RabbitMQ
- Kubernetes Containers: Node.js to Kubernetes
- Liveness and Readiness Healthchecks in Kubernetes
- Kubernetes Observability: Logging
- Kubernetes: Create and Inspect a Pod
- Run Stateful Services on Kubernetes
- Kubernetes Pipelines: SonarQube
- Deploy Containers to Kubernetes Using YAML
- Kubernetes Serverless: Kubeless
- Deploying Python APIs on Kubernetes: Deploying a Development Kubernetes Cluster
- Kubernetes Fundamentals: Sidecar Containers
- Kubernetes Applications: Istio
- Kubernetes Pipelines: Tekton Pipelines
- Launch a Multi-Node Kubernetes Cluster Using Kubeadm
- Kubernetes Fundamentals: Distilled JRE Apps in Containers
- Kubernetes Extensibility: Develop an Operator with KUDO

- Kubernetes Pipelines: Python Pipeline to Kubernetes
- Use Kubernetes to Manage Secrets and Passwords
- Kubernetes Fundamentals: Pods to Services Communication
- Kubernetes Serverless: OpenFaaS
- Kubernetes Chaos: Kube Monkey
- Kubernetes Extensibility: Develop an Operator with Kubebuilder
- Kubernetes Data: Persistent Data
- Cloud Native Data: Data Stores on Kubernetes
- Kubernetes Applications: Shiny R
- Kubernetes: Fix a Misconfigured Pod
- Kubernetes: Perform Rolling Updates for a Deployment
- Kubernetes Data: Running PostgreSQL
- Kubernetes Skills: Application Run and Update with YAML Manifests
- Kubernetes: Create an Init Container
- Add Additional Nodes to an Existing Kubernetes Cluster
- Kubernetes Data: Dev Workflows for Data-Driven Applications
- Kubernetes: Define and Mount a Persistent Volume
- Deploying Python APIs on Kubernetes: Deploying a Python Application Using Kubernetes
- Kubernetes: Define and Query Labels and Annotations
- Kubernetes: Route Traffic to Pods from Inside and Outside of a Cluster
- Kubernetes Pipelines: Registries
- Kubernetes Extensibility: Custom Resource Definitions
- Kubernetes Containers: Rust to Kubernetes
- Kubernetes: Define a Podâ□□s Readiness and Liveness Probe
- Kubernetes: Restricting Access to and from a Pod
- Kubernetes: Implement the Adapter Pattern
- Kubernetes Networking: Istio Traffic Management
- Kubernetes: Create and Use a ConfigMap



Container orchestrators (cont.)

- Kubernetes: Use a Service Account
- Kubernetes: Create and Use a Secret
- Kubernetes: Create a Scheduled Container Operation
- Kubernetes: Create a Security Context for a Pod
- Kubernetes Skills: Assembling a Multi-Component Application
- Kubernetes: Define a Pod's Resource Requirements
- Kubernetes Serverless: Nuclio
- Kubernetes Chaos: Chaoskube
- Kubernetes Pipelines: Consumer-Driven Contracts with Kubernetes
- Kubernetes Chaos: Kubelnvaders
- Kubernetes Containers: Kotlin to Kubernetes
- Kubernetes Chaos: Chaos Mesh
- Kubernetes Chaos: Litmus
- Kubernetes Extensibility: Kubectl CLI Plugins
- Kubernetes Chaos: Pure Chaos
- Kubernetes Machine Learning: BentoML to Kubernetes
- Kubernetes Extensibility: Kubectl CLI Plugin Development

Container platforms

- Launch a Docker Container
- Build Container Images in Docker
- Deploy a Static HTML Website as Container
- Deploy Your First Docker Container
- Docker Sandbox
- Dockerize Node.js
- Load Balancing Docker Containers Using NGINX Proxy
- Deploying Python APIs on Kubernetes: Containerizing a Python Application
- Create Optimized Docker Images using Multi-Stage Builds
- Create Networks Between Containers using Networks in Docker
- Hack an ElasticSearch Docker Container
- Create a Docker Overlay Network
- Persist Data Using Docker Volumes
- Read Vault Secrets from Docker Containers

- Create Data Containers with Docker
- Orchestrate Containers Using Docker Compose
- First Steps with Apache Airflow: Deploying Airflow Using Docker
- Add Healthchecks to Docker Containers
- Launch a Private Docker Registry
- Run Docker Containers From Rootless Users
- Launch a Consul Cluster using Docker
- Adding Docker Metadata & Labels
- Create Networks Between Containers Using Links in Docker
- Format Docker PS Output
- Deploy Docker Compose Files with Kompose
- Test CPU Performance with a Docker Container
- Manage Docker Container Log Files
- Deploy Kotlin and a Wasabi HTTP Server as a Docker Container
- Optimize Builds with Docker OnBuild
- Optimize a ASP.NET Core Docker Container
- Access .ssh Keys During Docker Build
- See Container Metrics with Docker Stats
- Ensure Docker Container Uptime with Restart Policies

Containers

- What Is a Container Image?
- Understand Container Security with CGroups and Namespaces
- Securing Containers with User Namespaces
- Get Started with Container Security and Seccomp
- Use No New Privileges Flag to Secure Containers

Data models

 Volatility Modeling and Its Application with Python



Data science

- Cleaner Code for Data Science: Writing Unit Tests in Python
- Data Preprocessing: Feature Selection
- Data Preprocessing: Feature Engineering Basics
- Data Preprocessing: Start to Finish
- Data Preprocessing: Normalizing and Scaling Data
- Data Preprocessing: Standardization and Modeling with knn
- Data Preprocessing: Feature Engineering and Extracting Features from Text
- Cleaner Code for Data Science: Logging in R
- Cleaner Code for Data Science: Writing Unit Tests in R

Data science tools

- R Cookbook: Some Basics
- Select and Filter Data with Pandas
- R Sandbox
- Getting Started with Python and Libraries
- Linear Regression from Scratch Using NumPy
- Aggregate Data with Pandas
- Merge and Join Data with Pandas
- Generate Summary Statistics with Pandas
- Concatenate Multiple Files with Pandas
- Understanding Eigenvalues and Eigenvectors Using Python
- Cleaner Code for Data Science: Using Auto Documentation Frameworks in R
- Introduction to Matrix Algebra Using Python
- Using gazpacho and pandas to Retrieve the Contents of an HTML Table
- Handling Categorical Data: Encoding Categorical Features

Data visualization

• Build a Node-RED COVID-19 Dashboard

Finance

Tools Used in Finance and Python

Frontend web development

• Render HTML Templates with Jinja2

Functional programming

- Functional Python: Simplifying List Processing with itertools
- Java Concurrent Programming: Basics and Thread Pools
- Functional Python: Reducing Duplication with Higher-Order Functions
- Java Concurrent Programming: Creating a CompletableFuture
- Functional Python: Reducing Boilerplate with Decorators
- Java Concurrent Programming: Functional Programming a CompletableFuture
- F# Sandbox
- Using Data Types and Variables in Rust
- Understanding Ownership and Borrowing in Rust
- Using Comments, Functions, and User Input in Rust
- Java Concurrent Programming: Learning New Advancements in CompletableFutures
- Using Control Flows and Mathematical Operations in Rust
- Java Concurrent Programming: Making an Incomplete Future
- Rust Sandbox

Git

- Commit Files with Git
- Commit Changes with Git
- Work Remotely with Git
- Fix Merge Conflicts with Git
- Find Bugs with Git
- Undo Changes with Git
- Experiment Using Branches with Git
- Git Sandbox
- Re-Write History with Git



Go

- Testing Go: Implementing a Test Helper
- Go Sandbox
- Testing Go: Testing in Isolation by Mocking an Interface
- Go Modules: Initializing and Using Modules for a Project
- Testing Go: Testing a Cobra CLI Command
- Testing Go: Implementing a Table-Driven
 Test
- Testing Go: Avoiding Network Calls and Mocking the Response
- Testing Go: Implementation and Execution of a Test Case with the testing Package
- Testing Go: Using a Golden File for JSON Data
- Go Modules: Vendoring Dependencies
- Go Modules: Handling Transitive Dependencies
- Go Modules: Migrating from Glide to Go Modules
- Testing Go: Setting Up and Tearing Down Test Fixtures
- Go Modules: Executing Module Queries
- Go Modules: Verifying and Tidying Dependencies
- Testing Go: Implementation and Execution of a Test Case with Testify
- Testing Go: Producing Code Coverage Metrics and Reports
- Go Modules: Using a Dependency with Multiple Major Versions
- Go Modules: Using JFrog GoCenter To Proxy Dependencies

Graph analytics

 Portfolio Theory and Its Application in Python

Graphics programming

- Linear Algebra in Image Processing Using Python
- Use Monte Carlo to Price Call Options
- Using gazpacho and urllib to Retrieve and Download Images, Videos, and Audio Clippings
- Use Monte Carlo to Price Put Options

Integration solutions

 Handling Categorical Data: Handling Imbalanced Classes

Java

- Java Sandbox
- Spring Boot: Create a REST Controller
- Java Challengers: Adding Elements to an ArrayList
- Spring Boot: Create a New Project
- Java 11 File API: Read and Write a String to a File
- Java Challengers: Every Class in Java Is an Object
- Maven: Install Maven and Create Your First Application
- Spring Boot: Dependency Injection
- Java Challengers: Creating a Class
- Java Lambdas: Packaging Reusable Logic
- Java Challengers: Sort String Elements from an ArrayList
- Java 11 Network API: Use HttpClient for Asynchronous HTTP Communication
- Java Challengers: Creating Customized Sorting for Customized Objects
- Spring Boot: Handling Errors
- Java IO: TextIO
- Spring Boot: Accessing Data with JdbcTemplate
- Java Lambdas: Sorting Data
- Spring Boot: Handling JSON
- Java Lambdas: Filtering Large Data Sets
- Java Challengers: Using Polymorphism with the List Interface
- Maven: Using Maven Plugins
- Spring Boot: Connect to a Database
- Maven: Compiling, Packaging, and Running Your Application
- Java 11 Network API: Use HttpClient for Synchronous HTTP Communication
- Java Challengers: Using Basic Looping
- Java Challengers: Manipulating an Instance
- Spring Security: Understanding the Default Configuration
- Java Challengers: Creating a Constructor
- Maven: Using Maven Archetypes
- Maven: Dependency Management
- Spring Boot: Populate a Database



Java (cont.)

- Java Challengers: Implementing a Method
- Java 11 String API: Check for Empty or Whitespaces in a String
- Java Challengers: Manipulating Primitive Variables
- Java 11 Collection API: Convert a Collection into an Array
- Java 11 String API: Process Multiline Strings
- Java Lambdas: Mapping Complex Data
- Java 11 Functional API: Check Whether a Value is Empty in Optional
- Java 11 String API: Repeat a String
- Spring Security: Creating a Custom User
- Spring Boot: Manipulating Data with JdbcTemplate
- Spring Security: Defining Authorization Based on User Roles
- Java Challengers: Multiple Values with Arrays
- Java Challengers: Handling Flow Control
- Java Challengers: Local Variable Scope
- Spring Boot: Using the Command Line Runner Interface
- Java 11 Functional API: Define Filtering Negation for Predicate
- Java Core Beam: ParDo OneToMany
- Java Core Beam: GroupByKey
- Java Challengers: Inheritance with the Animal Class
- Spring Security: Adding URL-Based Access Control
- Java Core Beam: ParDo
- Java Challengers: Returning Values from a Method
- Java Challengers: Abstract Classes and Polymorphism with the Animal Class
- Java Challengers: Using Polymorphism with the Animal Methods
- Java 11 String API: Remove Leading and Trailing Whitespaces from a String
- Java 11 CLI: Launch Single-File Program without Compilation
- Java Challengers: Initializing an Object with Values in the Constructor
- Java Challengers: Exposing an Attribute with a Public Method

- Java Challengers: Creating Private Fields and Methods
- Java Challengers: Printing Values with Access Methods

JavaScript

- Angular Fundamentals: Creating and Using Reusable Angular Services
- Angular Fundamentals: Template Variables and Styling Components
- Angular Fundamentals: Template Syntax and the Safe Navigation Operator
- Angular Fundamentals: Routing and Navigation Basics
- Angular Fundamentals: Creating a Template-Based Form
- Angular Fundamentals: Data-Bound Components and Component Communication
- Angular Fundamentals: Content Trimming and Conditional Content Styling
- Angular Fundamentals: Using Data Input in a Template-Based Form
- Angular Fundamentals: Creating Models for Type Safety
- Angular Fundamentals: Lazy Load a Feature Module
- Angular Fundamentals: Preloading Data and Styling Active/Inactive Links
- Angular Fundamentals: Guarding Against Route Activation and Deactivation

JUnit

- JUnit 5 Testing Basics: Descriptive Test Names
- JUnit 5 Testing Basics: Defining Assertions
- JUnit 5: Nested Tests
- JUnit 5: Fixture Setup and Teardown
- JUnit 5 Testing Basics: Disabling Tests
- JUnit 5: Expecting Thrown Exceptions



JVM languages

- Scala Sandbox
- Kotlin Sandbox
- Scala Implicits: Identifying Implicits in Scala
- Scala Implicits: Using an Implicit Value
- Scala Implicits: Creating an Implicit Converter
- Scala Implicits: Creating an Implicit Wrapper
- Scala Implicits: Looking up Implicit Bindings with Implicitly

Kali linux

- Kali Linux: Disassemble Malware Sample
- Kali Linux: Analyze Malware Looking at Text Strings
- Kali Linux: Identify Packed Executables Using Pescan
- Kali Linux: Perform an Anti-Virus Scan on a Malware Sample
- Kali Linux: Get File Details about Malware Sample

Linear algebra

- Introduction to Vector Algebra Using Python
- Exploring Vector Spaces Using Python
- System of Linear Equations Using Python

Linux

- Ubuntu Sandbox
- Linux Sandbox

Log data

- Fluentd: Logging Model Usage
- First Steps with Apache Airflow: Viewing the Logs of Your DAG

Machine learning

- Linear Regression Using Scikit-Learn
- Tensorflow Sandbox
- Python ML Cookbook: Vectors, Matrices, & Arrays
- Python ML Cookbook: Wrangling Data (Part 2)

- Python ML Cookbook: Handling Numerical Data
- Deploy Kubeflow
- Data Preprocessing: First Steps with pandas and scikit-learn
- Build and Save Robust Machine Learning Models
- Keras: Build and Debug a Simple Neural Network
- Deploy MLflow
- Machine Learning: Create a Basic ML Model Using Python
- Unix: Set Up a Basic ML Development Environment
- Serve Machine Learning Models with Flask
- Multiple Linear Regression Using Python
- NLP for TensorFlow: Introduction to TensorFlow
- Flask: Create an Endpoint for Your ML Model
- Deploy Machine Learning Apps with Dokku
- DVC: Creating a Machine Learning Pipeline
- Scikit-Learn: Build a Nearest Neighbors Recommendation Engine
- Finding Outliers: Anomaly Detection in scikit-learn
- LightFM: Build an Explicit Feedback Recommendation Engine
- Reducing Dimension with PCA in scikit-learn
- Polynomial Regression Using Python
- NLP for TensorFlow: Text Classificationâ□□Sentiment Analysis
- NLP for TensorFlow: Text
- MLflow: Tracking Experiment Runs
- Getting Started with Clustering in scikit-learn
- Spotlight: Build an Implicit Feedback Recommendation Engine
- Regularization in Regression Using Python
- NLP for TensorFlow: Text Translation with RNN
- NLP for TensorFlow: Word Embeddings



Machine learning (cont.)

- Optimization for Deep Learning: Using Gradient Descent to Train Your First Model in TensorFlow
- NLP for TensorFlow: Text Generation
- Presto First Steps: Expanding Your Installation to be a Cluster
- Optimization for Deep Learning: Putting It All into Practice with a Cats Versus Dogs Image Classifier in TensorFlow
- Optimization for Deep Learning:
 Optimizing the Hyperparameters for Faster Training with TensorFlow
- Putting It All into Practice with Intent Classification in TensorFlow
- TensorFlow Lite: Use Transfer Learning to Classify Pneumonia with TensorFlow
- Reproducible Deep Learning: Semantic Segmentation on Oxford Pets Dataset
- TensorFlow Lite: Use TensorFlow Lite Interpreter & Android Studio to Deploy a Model to Mobile
- Optimization for Deep Learning: Getting Started with Stochastic Methods in TensorFlow
- Spectral Clustering from Scratch Using Python
- Reproducible Deep Learning: Achieving 100% Reproducibility
- TensorFlow Lite: Convert a TensorFlow Pneumonia Classifier to TensorFlow Lite with Quantization
- Variance Reduction Techniquesâ

 Control Variates
- Reproducible Deep Learning: Random Seeds and Process-Parallelism
- Variance Reduction Techniquesâ
 Antithetic Variables
- Reproducible Deep Learning: Identifying the Reproducibility Challenge

Market segmentation and pricing

- Pricing European Options
- Asset Pricing Models and Its Application in Python

Microservices

 Handle Timeouts Between Microservices with Istio

Microsoft Office

- Pricing Knock-Out Options
- Understanding Word Embeddings Using Python

Monitoring

- Get Started with Prometheus
- Graph Docker Metrics with Prometheus

Natural language processing

- NLP with Python: Introduction to NLTK
- Regular Expressions: Repeating Regex Patterns with Quantifiers
- NLP with Python: Text Classification
- Regular Expressions: Literals and Ranges
- NLP with Python: Introduction to Word Embeddings
- Regular Expressions: Wildcards
- NLP with Python: Text Cleaning
- NLP with Python: Introduction to Bag of Words
- Regular Expressions: Anchoring
- Regular Expressions: Groups and Alternators
- NLP with Python: Introduction to n-Grams

Node.js

Node.js Sandbox

NoSQL Databases

- Cassandra: Run Cassandra in Docker
- Cassandra: Build a Microservice with Apache Cassandra and Apache Kafka
- Cassandra: Get to Know CQL
- MongoDB: Getting Started with CRUD Operations
- Cassandra: Design Tables
- Cassandra: Analyzing Data with the DataStax Spark-Cassandra Connector
- Cassandra: Push Data to Apache Cassandra with the DataStax Apache Kafka Connector
- Cassandra: Install Cassandra
- MongoDB: Creating Your First Full-Text Search Query
- MongoDB: Getting Started with Grouping
- Cassandra: Use Data Models



NoSQL Databases (cont.)

- MongoDB: First Steps with Transactions
- Cassandra: Types in CQL
- MongoDB: Advanced ETL with Projections
- MongoDB: Advanced Operations with Full-Text Search
- Cassandra: Query Options in CQL
- MongoDB: Finding Nearest Restaurants with Geospatial Queries
- MongoDB: Handling Arrays with \$unwind
- Cassandra: Extend Data Models
- Cassandra: Getting Started with the DataStax Java Driver
- Cassandra: Simple Statements with the DataStax Java Driver
- Cassandra: Prepared Statements and the DataStax Java Driver
- Cassandra: Lightweight Transactions with the DataStax Java Driver
- Cassandra: Object Mapping with the DataStax Java Driver
- Cassandra: Batch Statements with the DataStax Java Driver

Python

- Python Sandbox
- Python Cookbook: Classes & objects
- Python Cookbook: Strings & Text
- Python Cookbook: Data Structures & Algorithms
- Python Cookbook: Functions
- Python ML Cookbook: Wrangling Data (Part 1)
- Python Cookbook: Numbers, Dates & Times
- Python IO: TextIO
- Python Cookbook: Metaprogramming
- Python Cookbook: Data encoding & processing
- Python Cookbook: Iterators & generators
- Cleaner Code for Data Science: Logging in Python
- Threading in Python: Create a Single-Threaded Program
- Threading in Python: Create a Multi-Threaded Program Using a Thread Pool

- Threading in Python: Create a Multi-Threaded Program Using Thread Objects
- Cleaner Code for Data Science: Using Auto Documentation Frameworks in Python
- Python Core Beam: ParDo
- Time Value of Money and Python Implementation
- Functional Python: Implementing Immutable Data Structures
- Simulation Analysis and Its Application in Python
- Python Core Beam: GroupByKey
- PCA and SVD from Scratch Using Python
- Python Core Beam: ParDo OneToMany

Relational databases

- MySQL Sandbox
- PostgreSQL Replication: Getting Started
- PostgreSQL Replication: WAL
- PostgreSQL Replication: Physical Streaming Replication
- PostgreSQL Replication: Logical Replication
- PostgreSQL Replication: Logical Decoding

Ruby

Ruby Sandbox

Selenium

 Using gazpacho and Selenium to Retrieve the Contents of a Password-Protected Web Page

Serverless architecture

• Kubernetes Serverless: Knative

Single board computers

Estimate Pi Using Monte Carlo

Software estimation

 Understanding Estimates and Error Bands



SQL

- SQL: Filter Text, Dates, and Times with WHERE
- SQL: Retrieve Data with SELECT
- SQL: Joining Multiple Tables
- SQL: Joining Tables with INNER JOIN
- SQL: Joining Tables with LEFT JOIN
- Presto First Steps: Writing and Running SQL Queries
- First Steps with Apache Airflow: Querying the Airflow Database
- SQL: Aggregating and Filtering Data
- Presto First Steps: Installation to First Queries
- SQL: Conditionally Aggregating Data Using the Zero/NULL Case Trick
- SQL: Counting, Grouping, and Ordering Data
- SQL: Filter Booleans, Nulls, and Precedence with WHERE
- SQL: Appending and Conditionally Transforming Data
- SQL: Filter Numbers and Logic with WHERE
- SQL Ranges: Locate a Range
- SQL Ranges: Generate a Series of Values
- SQL Ranges: Fill In Missing Values
- SQL Ranges: Find the Start and End of a Range

Statistics

- Probability from Scratch: The Monty Hall Problem: Monte Carlo Simulation
- Probability from Scratch: Probability Logic
- Probability from Scratch: Conditional Probability and Bayes Theorem
- Probability from Scratch: Discovering Binomial and Beta Distribution
- Probability from Scratch: Discovering the Normal Distribution
- Necessary Statistics in Finance

Storage repositories

 Cloud Native Data: Data Store per Service

Streaming and messaging

- Java Streams: Using the Java Streams API
- Kafka Streams: Installing Kafka
- Getting Started with Queuing Using Apache Pulsar
- Java Streams: Mapping, Reducing, and Collecting Rich Data
- Kafka Streams: Installing Kafka Streams
- Getting Started with Pub-Sub Messaging Using Apache Pulsar
- First Steps with Apache Airflow: Running Your DAG
- Kafka: Schema Evolution
- Pulsar: Produce and Consume Events to Pulsar Topics Using Java Client
- Pulsar: Submit a Connector to Consume Events from Pulsar
- Kafka Streams: Create a Custom News Feed
- Kafka Streams: Publish News Feeds to Kafka
- Java Streams: Creating Streams and Building Generators
- Kafka: Schema Registry
- Pulsar: Produce and Consume Events to Pulsar Topics Using AVRO and JSON Schema
- Pulsar: Submit a Connector to Write Events to Pulsar
- Pulsar: Develop a Pulsar Connector
- Pulsar: Write a Pulsar Function to Process Events
- Kafka: Configuration for Beginners

Swift

Swift Sandbox

Technical writing

 First Steps with Apache Airflow: Writing a DAG

Time series

 Simulating Entire Time Series of GBM Paths



Trading stocks

- Quantitative Trading with Python: Download Data and Set Up a Trading Strategy
- Quantitative Trading with Python: Loading Data Using Python
- Quantitative Trading with Python: Initialize Backtest Using the Backtrader Framework
- Quantitative Trading with Python:
 Developing a Trading Strategy
- Quantitative Trading with Python: Moving Averages and Volatility
- Quantitative Trading with Python: Methods of Calculating Returns
- Quantitative Trading with Python: Run the Backtest and Plotting Results
- Quantitative Trading with Python: Calculating Bollinger Bands

Unix

- bash Cookbook: Beginning bash
- bash Cookbook: Standard Output
- Bash Sandbox

Web API's

Financial Data Sources and APIs in Python

Web performance

Test Network Performance with iPerf

Web scraping

 Using gazpacho to Download and Parse the Contents of a Website

Web servers

 Deploy an NGINX Container Using Terraform

WebAssembly

- WebAssembly with C/C++: Calculating the Digits of Pi with WebAssembly
- WebAssembly with C/C++: Compiling a Fractals Generator to WebAssembly
- WebAssembly with C/C++: Compressing Files in the Browser with WebAssembly