

Data Science with (



Special Topics

Time Series Forecasting

- sktime Scikit-Learn Extension for Time Series
- statsmodels Time Series Analysis
- GluonTS MXNet/Gluon Deep Learning for Time

Time Series Features

- TSFresh Time Series Feature Engineering
- tslearn Time Series Features
- Pandas Time Series
- Arrow Human-Friendly Time

Web

- beautifulsoup Extract data from HTML
- requests-html HTML Parsing
- scrappy Web crawling

MS Office & PDF

- XIsxWriter Create Excel Workbooks
- pyexcel -Read/Write Excel
- xlwings Call python from Excel
- python-docx Word Documents
- python-pptx PowerPoint Documents
- pdfminer Text extraction from PDF
- textract Extract text from any document
- PvPDF2 Create PDF documents
- gspread Google Sheets

Text Analysis & NLP

- NLTK Text Tokenization & Modeling
- spaCy NLP using Cython for Speed
- fuzzywuzzy Fuzzy String Matching

Recommendation **Systems**

- Annoy Approximate Nearest Neighbors
- LightFM Popular recommendation algo's.

Apps & APIs

- FastAPI Web framework for building APIs in Python
- Flask Web Development
- Dash & Streamlit DS Web Frameworks

MLOps

- MLFlow Machine Learning Lifecycle, Tracking, Deployment
- MetaFlow Scalable AWS Jobs for Data Scientists

Cloud

- boto3 (AWS) AWS Python SDK
- Google Cloud GCP Python SDK
- Azure Azure Python SDK

ETL & Automations

- Airflow Workflow Scheduling & Monitoring
- · Luigi Batch Job Tool, Scheduling, Monitoring
- Ansible Deployment Automation
- JobLib Run python jobs

Machine Learning

- Scikit-Learn ML in Python
- H2O Scalable & AutoML
- TPOT TPOT Automated ML Tool
- PyCaret PyCaret Low Code ML
- Dask ML Scalable ML with Dask
- ML Packages
 - XGBoost
 - LightGBM
 - CatBoost

Feature Engineering

- Featuretools Automated Feature Engineering
- sklearn-pandas Sklearn Extension for Pandas
- category encoders Categorical Encoding
- imbalanced-learn Resampling for Imbalanced

Deep Learning

- TensorFlow & Keras
- pytorch
- MXNet, Gluon, & GluonTS
- OpenAl Gym Reenforcement Learning

Image & Comp Vision

- OpenCV Open Source Computer Vision
- Scikit Image Image Processing
- Pillow Python Imaging Library

Speed & Scale

- datatable C++ Speed Up
- Dask (CS) Parallel Pandas
- RAPIDS (CS)- GPU Accelerated Pandas
- PySpark Spark Clusters
- Optimus PySpark Extension for Humans

Coming from R?

- R-to-Pandas Comparison
- siuba & plydata dplyr/tidyr ports
- datatable data.table port
- plotnine ggplot2 port







