Result oriented Data Scientist having strong mix of technical, soft skills, and IT business understanding

RELEVANT TECHNICAL SKILLS AND COMPETENCIES

Programming:

- Python syntax, data structures, object orientation
 Relevant Python libraries: Pandas, Numpy, Scipy, Keras, Tensorflow, Pytorch, Matplotlib, Sklearn, etc
 Seaborn, Gdal, etc.
- Bash/Shell Scripting
- Linux, Tmux sessions manager, GPU computing with TF & CUDA
- SQL and Spark Queries
- Docker, Python virtual environment
- Architectures, Data interfaces
- MapReduce, HDFS, Spark
- MS Azure, AWS cloud architectures and services

Experience of ML algorithms, and methods of data analysis:

- Inferential Statistics, Sampling methods, hypothesis testing
- Data Augmentation, Synthetic Data generation
- OLS/GLS for regression and classification. Gauss-Markov theorem. Polynomial approximation
- Empirical Risk Estimation Models, Logit/Probit: Binary, Ordered, and Multinomial; Regularization
- Ensembles of Algorithms: Bagging & Boosting. Random Forest, Xgboost. Stacking
- Logit/Probit for binary classifications, Ordered Logit, Multinomial Logit, Regularization
- Cross Validation
- Dimension reduction, clustering, KNN, Parzen Window
- Stochastic Grid Search hyper-parameter optimization
- Statistical Modeling: Cross Sectional data modeling, time-series models and analysis
- Signal Processing
- Designed own state of art methods for class balancing, multicollinearity problem solution having advantages compering to PCA or regularization, and others. Publications under request

Neural Networks:

- Deep Neural Networks Hyperparameter tuning, Regularization, and Optimization: L1, L2, and Elastic Net weight penalties; Dropout; Early Train Stop; Data Normalization; Batch Normalization
- Fully connected NNs. MLP
- Convolutional Neural Networks. Architectures: Unet, ResNet, AlexNet, Inception, etc.
- Sequence Models, Recurrent Neural Networks: LSTM, GRU, Bidirectional RNNs
- Generative Neural Networks

Algorithms and Data Structures:

Math skills: Statistical inference, Discrete Math, Graphs, Linear Algebra, Calculus, Empirical and Quantitative methods in CS, Methods of Function Optimization

PROFESSIONAL EXPERIENCE

2019-recent days

Modus, DTEK

Data Scientist / Tech Lead

- Reached high ROI and other positive effects in 8 out of 9 projects
- Accomplishing managerial functions, code review
- Performing all cycle of products development
- Designing product features
- Developing comprehensive predictive analytics models based on classical Machine Learning, and Deep Learning
- Developing validation procedures, A/B testing
- Developing custom optimization algorithms
- Built successful team and process from scratch

2018 - 2019

EOS Data Analytics (office Kyiv) – <u>www.eos.com</u> Senior Data Scientist / Team Leader / Remote Sensing

- Lead a team of 7 Data Scientists and Data Engineers
- Setting tasks to the team, monitor the performance, code review
- Responsible for all stages of the process of building ML algorithms from the research stage till production
- Improving performance, and quality of AI algorithms based on Neural Networks (projects for agriculture)

2017 - 2018

EOS Data Analytics (office Kyiv) – www.eos.com

Data Scientist / Computer Vision Researcher / Remote Sensing

- Built AI predictive models based on NNs for crop monitoring
- Solved geospatial interpolation problems
- Performed comparative analysis of algorithms, improved overall accuracy in product performance
- Researched the quantitative relations between weather factors and crop yield

2016 - 2017

GFK Ukraine – www.gfk.com

Senior Data Scientist / Team Leader of Global Data Science Hub *Marketing & Data Science*

- Lead a team of 11 members
- Developed methodologies for complex types of analysis: Product Line Optimization, Price Optimization, New Product Launch
- Conduct Time Series forecasting with dynamic econometric models: ARMA/ARIMA, Partial Adjustment/Error Correction Multifactor Models
- Measure influence of marketing activities on key KPIs
- Optimized the cash flows between trade marketing and outdoor
- Built predictive models of Market Demand / Brand sales

GFK Ukraine – www.gfk.com

Senior Data Analyst /Consumer Electronics Sector Head, Point of Sales Tracking department

- Responsible for sector performance, €400k annual sales
- Led a team of three
- Performed market analysis using statistical methods and econometric modeling
- Applied statistics and econometrics to forecast markets
- Delivered presentations on the results of market analysis
- Controlled the research methodology

2014 - 2015

GFK Ukraine - www.gfk.com

Data Analyst, Retail Service Sector

- Performed market analysis using statistical and econometric modeling tools
- Provided clients with regular market reports
- Building Dashboards

EDUCATION

2017

Kyivstar Big Data School 2.0

Successfully graduated the program

Free short term program where 20/1714 candidates were selected for the program based on the results of Overall Accuracy Metrics of the developed algorithms solving specific business problem

· Learned ML algorithms, Hadoop, Spark

2016 - 2017

Kyiv School of Economics, University of Houston MA

Master in Applied Economics, Data Science Track

- Achieved high academic results
- TOP 15% High Quality Awards, *Changellenge Cup Russia (case competition for students)*

Relevant courses: Calculus, Statistics and Econometrics I-III, Game Theory, Big Data, Data Analytics and Visualization in R

2009 - 2013

Kyiv Polytechnic University

Bachelor in Programming Engineering

- The best thesis award (AI system for land cover classification)
- Achieved high academic results average grade 91/100

CERTIFICATES, COURSES

Data Science Management – J. Hopkins University

Dec 2018: **Kaggle Silver Award** at Global AirBus Ship Detection Challenge

Yandex Machine Learning course

Neural Networks and $DL-Andrew\ Ng$

Improving Deep NN – Andrew Ng

Convolutional NNs - Andrew Ng

Math and Python for Data Analysis

Programming with Python

Python Data Structures

Python to Access Web Data

Programming with Java

Programming with C++

Database Management (SQL/MySQL)

Stanford CS 231n (CNNs) – self passed

In progress

(Kaggle competitions is the platform where machine learners compete for the best algorithm, owned by Google LLC.)