Vania Todorova

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https://www.linkedin.com/in/vania-todorova

EDUCATION

University of Missouri- Kansas City M.S. Computer Science- Data Science GPA 3.74 May 2022

University of Missouri- Kansas City

May 2019

Bachelor of Arts in Computer Science

University of Missouri- Kansas City

May 2019

Bachelor of Science in Math& Statistics

University of Missouri- Kansas City

Dec 2011

Doctor of Musical Arts- Piano Performance

WORK HISTORY

Signify(formerly Philips Lighting) - Cambridge, Ma

Deep Learning/ Time Series Research Intern

January-

- May 2022
 - Anomaly detection using machine learning and deep learning methods
 - EDA
 - Predictive Maintenance

<u>Chemours – Wilmington , De</u>

May August2021

Data Scientist Co-op

- Defect classification exploring Computer Vision and Deep Learning methods for Unsupervised learning, Self Supervised Contrastive Learning
- Data Analysis, Apriori and Time Series for defect prediction

Dimensional Innovations

October

2019- May 2021 Data Scientist

- Build a continuous data pipeline from various sensors and devices to deliver data for analytics through ReST API's
- Data cleaning

- Firebase- Gcloud database for data storage
- Time Series Forecasting- exponential smoothing, ARIMA, SARIMA, LSTM
- Visualization in Tableau- build dashboards that visualize various stats and predictions from the data. Build graphs, tiles, data/image pipelines using various calculations and other Tableau techniques.
- Build image filters for installations

UMKC – School of Computing and Engineering Graduate Research Assistant

- Read 16-18 century manuscripts using Deep learning methods
- Image pre-processing using various filters, transforms, morphological techniques
- Segmentation
- CRNN for processing the documents

COX Automotive

May-Aug 2019

Machine Learning Graduate intern

- Create an algorithm to find best channel to communicate with a customer
- Create an algorithm to find best time to communicate with a customer
- Use AWS SageMaker, S3 buckets

Rockhurst University

August 2015 -present Piano instructor

- teaching individuals lessons Piano 1,2,3,4
- assign semester long projects

SKILLS

- Proficient in Python, SQL, Tableau, AWS, Gcloud, R, Matlab
- · Data Mining
- Data Analysis
- Deep Learning, Machine Learning and Statistics
- Pytorch, Tensorflow, Keras
- Computer Vision, PIL, Opency, Sci-image, Image Manipulation, Filters
- Natural Language Processing
- Time Series Forecasting
- Regression Analysis

RELEVANT CLASSES

Applied Numerical Methods, Regression Analysis, Time Series, Probabilistic Graphical Models, Computer Vision1&2 (Filters and Segmentation techniques), Digital Image Processing, Mathematical Statistics 1&2(graduate), Neural and Adaptive Networks, Intro to Statistical Learning, Intro to Databases, Python& Deep Learning, Intro to Cryptography, Into to Operating Systems, Software Engineering Capstone, Design and Algorithm, Foundations of Software

Engineering, Data Structures, Intro to Math Stats 1&2, Partial Differential Equations, Ordinary Differential Equations, Linear Algebra 1&2, Advanced Analysis, Sets and Proofs, Calculus-1,2,3

Additional Courses

Neural Networks and Deep Learning (Andrew Ng/Coursera)

Baysian Methods for Machine Learning(Coursera)

OpenCV(learnopency.org)

Stochastic Processes (Coursera)

Practical Time Series (Coursera SUNY)

Fundamentals of Digital Image and Video Processing(NWU Coursera)

PROJECTS

Previous Research Projects

•Image and Video restoration using Computer Vision and Deep Learning methods – Optical Flow, Super Resolution, Deblurring

Spring 2019

Android app for teaching beginners the music notes

- Java
- Android Studio
- UI

Commerce Bank Group Project

- Create a web page to offer ways to manage your financial spending
- Design SQL databases for the project
- Use T-SQL and SSIS to connect to Commerce bank database