**Nianyou Zhang**

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**Education**

**Syracuse University** – School of Information Studies, Syracuse NY December 2021

Master of Science in Applied Data Science

**The Ohio State University** – College of Arts and Sciences, Columbus OH May 2018

Bachelor of Science in Mathematics

Key courses: Vector Analysis, Dynamic Systems, Scientific Computation

**Experience**

**Research Intern**

WEB and Software Technology Research Center, Research Institute of Information Technology, Tsinghua University, Beijing, China July- Nov. 2019

* Studied Semantic Network, Resource Description Framework (RDF) and Web Ontology Language (OWL)
* Learned Apache Jena, Protocol and RDF Query Language (SPARQL)
* Wrote patent descriptions for papers *DEKGB an Extensible Framework for Health Knowledge Graph*, *CLMed A Cross-lingual Knowledge Graph Framework for Cardiovascular Diseases* and *DocKG A Knowledge Graph Framework for Health with Doctor-in-the-Loop*

**Professional Tutor**

The Ohio State University, Student-Athlete Support Services Office, Columbus OH Nov 2018- July 2019

* Tutored, average 5 athletes weekly, on Calculus 1151 & 1152 to achieve improvement in homework and exam performance
* Explained challenging concepts, limit, differentiation, integration with tangible examples from physics and business applications
* Reinforced techniques such as optimization with differentiation, substitution in differentiation and integration

**Research Intern**

Chinese Academy of Agricultural Sciences, Beijing, China July-Nov. 2015

* Planted sample rice in controlled conditions
* Processed sample plants and soil by cutting and grinding
* Prepared chemicals for extracting heavy metals from samples
* Recorded and analyzed data to assess the pollution level in different regions across country

**Technical Skills**

Programing language: R, Python, SQL

Software: Microsoft Excel (lookup, correlation, regression, forecasting, 3D maps, Power Query, Power Pivot, Solver), Access (queries), Google Analytics and Adwords, Tableau (dashboards), Power BI (dashboards)

Techniques:

Machine Learning: Linear & Non-linear Regression, Clustering, Decision Tree, Association Rule Mining, Deep Learning (Transformers), Transferred Learning.

Natural Language Processing and Text Mining: Topic Modeling, Sentiment Analysis

**Leadership**

**English Teacher**

New Oriental Education & Technology Group Inc., Beijing, China May-July 2016

* Lectured English, Cambridge Interchange 2 and 3, for Chinese high school juniors, 7 hours per day, 10 days per session
* Crafted interesting and engaging lectures for classes consisting of 12-60 students by organizing enjoyable and meaningful class activities