YUAN DONG

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Fox School of Business, Temple University

EDUCATION

Temple University *August 2020 - present*
PhD in Business Administration with a concentration in Supply Chain and Operations Management
Fox School of Business

Georgia Institute of Technology *August 2017 - August 2019*
Master of Science in Operational Research
H. Milton Stewart School of Industrial & Systems Engineering

Zhejiang University *2013 - 2017*
Bachelor of Science in Industrial Engineering
Overseas Education and Employment Association, 2013-2015; President, 2015

ANALYTICS SKILLS

Programming Languages & Softwares	MATLAB, Cplex, Gurobi, R, Python, LaTeX, Simio, Witness, SQL, Microsoft Office
Courses Taken	Linear Optimization (PhD level), Theoretical Statistics (PhD level), Computational Methods (PhD level), Stochastic Process (PhD level), Computational Data Analysis, Real Analysis (PhD level), Simulation, Numerical Linear Algebra

RESEARCH

Communication reduction in distributed SGD based on mnist dataset
October 2019 - Jan 2020

Under a professor at Lehigh University

· Write python code to utilize SGD in neural network with pytorch package
· Parallelize the algorithm using mpi4py package and evaluate the increase in speed
· Consider different vector compression ways to reduce communication between processes and prove their convergence
· Explore the convergence of non-stochastic compression ways of gradient in SGD
· Perform vector compression ways in python based on natural compression and quantized gradient and compare

Compare different algorithms in classification based on Yelp photo data sets
March 2019 - May 2019

H. Milton Stewart School of Industrial & Systems Engineering

· Write code to do photo classification in LDA, QDA, EM, Neural network algorithms respectively with python
· Randomly choose 5 different sizes of picture groups from Yelp data sets to train the models above
· Compare algorithms above in terms of time consumption and accuracy of classification

Cost model development and analysis for additively manufactured parts
November 2016 - June 2017

School of Mechanical and Industrial Engineering

· Put forward Assumptions and built the mathematical model of the cost of selective laser melting process
· Implemented experiment on producing a bolt and collected time data to verify the model
· Performed sensitive analysis and came up with ways to lower the cost of selected laser melting process.

Facility location and distribution system analysis and planning July 2016

School of Mechanical and Industrial Engineering

· Set up Nonlinear Optimization Model of Facility Location and Distribution System
· Found errors in large scale of given location data and eliminated influence of incorrect data
· Ran the program to get solution with stopping condition that the solution given by the program was close enough to real optimal solution.

Simulation and optimization of the production of car doors October 2015 - November 2015

School of Mechanical and Industrial Engineering

· Set up a mathematical model of production line of car doors both with FMS system or without
· Built the model in Witness simulation software and simulated the production line for a month with a shift plan in practice
· Found the fewest amount of facilities required to fulfill demand and determine whether it is worthwhile to use the FMS system.

ACHIEVEMENTS

Excellent Engineers Class (Honor Class), Zhejiang University	*April 2016 - June 2017*
Meritorious Winner of Interdisciplinary Contest in Modeling	*February 2016*
Scholarship of the Institute of Mechatronic Control Engineering	*October 2016*
Half Marathon finished in 2 hours 13 minutes	*November 2015*
Plateau cycling up and down mountains for over 225 miles in 4 days	*August 2013*