CHUN YU WU

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Education:

Binghamton University, State University of New York, Watson School of Engineering

Master of Science in Industrial and System Engineering

May 2020

Cumulative GPA: 3.90

Alpha Pi Mu Industrial Engineering Honor Society

Tunghai University, College of Engineering

Bachelor of Science in Industrial Engineering and Enterprise Information

Cumulative GPA: 3.32

June 2016

Related Courses: Computer Programming, Computational Tools, Collective Dynamic of Complex Systems, Applied Probability and Statistic, Enterprise Systems Engineering, Operations Research, Stochastic Systems, Integer Programming, Modeling and Simulation, Quality Assurance for Engineering, Network Programming and Database Design, Data Processing Using Microsoft Access, Computational Tools.

Technical Skills:

•	Python	•	R	•	SQL	•	Tensorflow	•	Scikit-learn
•	Basic Linux	•	Simul8	•	Matlab	•	Basic C/C++	•	Git/Github

Certifications:

• Lean Six Sigma Green Belt (ICGB)

Professional Experience:

Tunghai University, Department of Industrial Engineering and Enterprise Information

Taichung, Taiwan

Research Assistant

June 2019 - August 2019

- Developed pipeline of simulation model design of slide rail manufacturing process.
- Organized data and extracted useful subset via PostgreSQL and conducted data cleaning with R.

Genius Electronic Optical Co., Ltd. – Optical Lenses and LED Manufacturing

Taichung, Taiwan

Summer Intern

July 2015 – August 2015

- Developed LED manufacturing process simulation model via Simul 8.
- Simulated manufacturing process and identified the bottleneck of process via productivity efficiency.
- Provided solutions of productivity improvement to increase overall efficiency by resource allocation optimization.

Sanneng Bakeware Corporation – Bakeware Manufacturing

Taichung, Taiwan

Intern

December 2014 – May 2015

- Set up standard operation procedure (SOP) and standard workforce of workstation in packaging department.
- Developed packaging process simulation model and provided efficiency improvement plan via resources allocation optimization.
- Assisted products packaging and monitored inventory level.

Project Experience:

INFORMS 2020 QSR Data Challenge - CT Scan Diagnosis for COVID-19

Binghamton, NY

Team member

July 2020 – September 2020

- Designed CT image pre-processing and data cleaning pipeline to improve classification performance.
- Developed ResNet50 transfer learning model to classify COVID-19 cases with Python, and the accuracy of classification model reached 96%.

Short Single Lead ECG Classification by Convolutional Neural Networks

Binghamton, NY

MSIE project

August 2019 – May 2020

- Developed ECG signal pre-process using Python to extract heartbeats from ECG and created feature set of heartbeat.
- Designed and developed time series classification of Atrial fibrillation via 1D convolution neural network classification model and Image classification of Atrial fibrillation via 2D convolution neural network classification model.

Optimizing Patient Flow via resources allocation in an Emergency Department

Binghamton, NY

Team leader February 2019 – May 2019

- Designed and developed emergency department simulation model using Simul 8 to simulate patent flow.
- Identified the bottleneck of emergency department and provided the improvement plan by optimizing resource allocation.

Leadership and Involvement:

Binghamton University Taiwanese Student Association (TSA)

Binghamton, NY

President

March 2019 - March 2020

- Organized welcome events and hosted orientation for Taiwanese students.
- Provided services for house moving, living guides and help to members.
- Coordinate celebration events for members to stay connected and exchange information and life experiences.