John Guo

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EDUCATION

Cornell University, Ithaca, NY   Expected May 2024

Bachelor of Science, Computer Science. Dyson Business Minor for Engineers

EXPERIENCE

Lockheed Martin Owego, NY   June-Present

College Student Tech Senior

Produced model to predict supplier lead times and training pipeline for future use

- Used Python, Sklearn, and Seaborn
- Worked with stakeholders to better understand data
- Encoded multi-modal data to consistent numerical representation
- Experimented with various models and hyper-parameters to improve model accuracy in addition to various encoding methods
- Checked statistical relationships in data to prevent over-fitting

Helped guide new intern working on related supplier lead time project

- Recommended practices for organizing project files
- Suggested potential models to explore

Lockheed Martin Owego, NY   June-Aug. 2021

College Student Tech

Migrated and modernized supply management app to web app which improved performance and maintainability

- Used .NET with Angular frontend, deployed app using OpenShift
- Centralized web app made the program more maintainable than legacy Microsoft Access app
- Improved user experience using material design

Created machine learning system for document scanning

- Made program and deployed web app using Domino Data Lab
- System's purpose is to determine whether a given document contains classified data and the pages on which data occurs

Lockheed Martin Owego, NY   June-Aug. 2020

College Student Tech

Created web app to replace existing information entry desktop app

- Developed .NET web app and deployed it using PCF

Lockheed Martin Owego, NY   June-Aug. 2019

Highschool Student Tech

Created web app to replace existing desktop app

- Used .NET to create the application

Improved script from previous internship to support more features

- PowerShell script synchronizes information about EC2 instances between SharePoint and AWS
- Automation improved productivity and accuracy by reducing amount of repetitive work

Lockheed Martin Owego, NY   June-Aug. 2018

Highschool Student Tech

Made visualization of network performance to aid in identification of congestion

- Imported and visualized data using Tableau
- Live updates regarding network performance in various regions across the United States helped identify issues faster

Implemented script to sync server tags

- Used PowerShell to ensure tag information about EC2 instances are consistent between SharePoint and AWS

Projects

Paragraph Rater Model   July 2021

Tensorflow, Huggingface, Python

Created model that rates given paragraph in comparison to classic novels

- Gathered and processed data from various classic novels such as Sherlock Holmes
- Experimented with various models and classification layers to improve model performance and inference speed

Sentence Similarity Model   June 2021

Tensorflow, Huggingface Transformers, Python

Trained model to rate semantic similarity of two given sentences

- Able to be quickly loaded, and consumes less than 1GB of memory
- Intended to become component of general intent classification system

MNIST GAN   April 2021

Tensorflow, Python

Made model that learned how to draw handwritten numbers

- Implemented custom deep CNN in Tensorflow

Skills

- Programming Languages: Python, Java, C#, Javascript, Typescript
- Tools and Skills: Tensorflow, Domino Data Lab, .NET Core, Flask, HTML