

Fortythree Shiaohongtu

EDUCATION

The University of Texas at Dallas

B.S. in Computer Science

December 2019 | GPA 3.7/4.0

CONTACT INFO

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SKILLS

Programming Languages

Python • Node.js • Java • C#

JavaScript • HTML • LaTeX

Scala

Databases

SQL • Oracle • SQLite

MongoDB • AzureCosmosDB

AmazonRDS • AmazonAthena

Databricks • BigQuery

Languages

English, *Fluent*

Mandarin Chinese, *Fluent*

Cloud-Based Technologies

AWS • Docker • Spark

Automation

Apache Airflow

COURSEWORK

Machine Learning

Probabilistic Graphical Models

Network Security

Database Design

Data Structures & Algorithms

Operating Systems Concepts

Convolutional Neural Networks

CERTIFICATION

Tensorflow Developer Certificate

EXPERIENCE

SIGMOID ANALYTICS, *Associate Software Engineer*

Remote

September 2020 — Now

- Create automation scripts for cloud-based **ETL** pipelines using **AWS** services and **airflow**. One project involves survey data landing in an S3 bucket which will trigger a **Lambda** function that starts an airflow DAG. Another would be creating a **docker image** containing scripts that performs machine learning training and prediction process using **AWS SageMaker** and **Kubernetes** pods
- Lead and guide team members in their development within the project. Improves overall code quality and efficiency between different teams

FILE & SERVE EXPRESS, *Junior Software Developer*

Irving, Texas

June 2019 — March 2020

- Exposed **REST APIs** on a legacy system and utilized its functionality on a GUI using **C#**. This improved efficiency and performance in manipulating data by the AppOps team
- Developed web-based **C# .NET Core** applications using Visual Studio
- Created unit tests for all code submitted and extend test coverage for existing legacy code
- Collaborated with the QA analyst team to understand application functionality and automate test cases
- Maintenance and support of electronic filing service provide products, including front-end UI improvements/updated with back-end integration and performance upgrades
- Mentored and assisted others in the team who are less familiar with the code base to establish knowledge on the product, which increased development speed and maximized sprint cycle efficiency

PROJECTS

TENSORFLOW PRACTICE

July 2020 — August 2020

- Built multiple different neural network models using **Tensorflow** for different tasks
- Tasks includes image classification, text sentiment analysis, time series forecasting, and text generation

DEEP LEARNING ON MINESWEEPER May 2020 — September 2020

- Implemented game logic and machine learning models using **python** and front end UI using **Flask**
- Agents learned completely through self-play, with no past human experiences
- Utilized the **Keras** and **Tensorflow** library
- Models created using **convolutional neural network** by applying different techniques such as **batch normalization**, **dropout**, **padding**, and **residual connections**
- Created multiple reinforcement learning agents using **policy gradient**, **actor-critic** and **q-learning** method

INTELLIGENT TUTORING SYSTEM

January 2019 — May 2019

- Web application that captures student's attentiveness and emotion during lectures
- Back-end machine learning model implemented using **python**, **mongoDB** as database and **node.js** for front-end UI
- Worked in a team of 5 people including an adviser where tasks were split among the team in weekly meetings