Fortythree Shiaohongtu

EDUCATION

The University of Texas at Dallas
M.S. in Computer Science
December 2020 | GPA 3.5/4.0
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
Databases
SQL • Oracle • SQLite
MongoDB • AzureCosmosDB
Languages
English, *Fluent*
Mandarin Chinese, *Fluent*

COURSEWORK

Machine Learning
Probabilistic Graphical Models
Network Security
Database Design
Data Structures & Algorithms
Operating Systems Concepts
Convolutional Neural Networks

CERTIFICATION

Tensorflow Developer Certificate

EXPERIENCE

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

KOBE STEAKS, *Server*
Addison, Texas   May 2017 — May 2019
- Customer-service focused, ensured that guests had a high quality dining experience
- Worked collaboratively with other employees in a team-driven environment

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 — Present
- 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 advisor where tasks were split among the team in weekly meetings

SECURE CLIENT-SERVER NETWORK   Oct 2019 — December 2019
- Secure file transfer using **TCP** in terms of authentication, integrity and confidentiality
- Implemented using **RSA public** and **private keys**, **XOR** operation and **hashing** in python