Jiayi Zhou

Email: judyzhou959@utexas.edu | Cell Phone: (571) 269-9367
LinkedIn:www.linkedin.com/in/jiayi-zhou-utexas

EDUCATION

The University of Texas at Austin - Austin, TX   Expected May 2021

- BS in Computer Science | GPA: 3.89/4.00
- Coursework: Principles of Computer Systems, Algorithms and Complexity, Computer Organization And Architecture, Python, Java, Data Structure, Discrete Math, Introduction to Probability and Statistics
- Natural Sciences College Scholar 2018
- University Honors (Spring 2018; Spring 2017; Fall 2017)

EXPERIENCE

Deep Brain Research - *Undergraduate Research Assistant*; Austin, TX   August 2018 - December 2018

- Developed virtual environments to test different navigation models in the human brain through simulated spatial navigation tasks.
- Scripting C# to designing and programming virtual environments within the Unity game engine.

Mobike - *Data Analyst Intern - TECH-Big Data/BI Group*; Beijing,China   May 2018 - August 2018

- Built, developed and maintained tables in overall data mart by writing SQL queries and shell scripts.
- Programmed complex SQL queries across large volumes of data on datasets (Hadoop, MySql) for data mining, cleaning and munging.
- Used Mobike's internal data visualization tool (similar to Tableau) to create visualizations, and interactive dashboards.
- Analyzed users' behaviors that should be tracked for company's analytical requirements. Designed a data tracking PRD(Product Requirement Documentation) for technical team based on Event Recording Model. Programmed Hive SQL queries to cleanse and normalize collected raw data into high-quality aligned with company's analytical requirements
- Conducted data analysis with Excel(pivot table, vlookup) for PM team and International Strategy team in order to evaluate, identify, and implement actionable business performance measures.
- Used Python, Pandas, and Numpy to cleanse and manipulate raw data.

PROJECTS

Art Gallery - Unity3D project   Fall 2018

- Created 3D environment for studying spatial navigation. Current level: control player's view by mouse; control player's movement by keyboards; the door will be open after player correctly matching same pictures on the wall.

Random Writer - Python project   Fall 2018

- Used a Markov chain to create a statistical model of a piece of English text or bytes. Simulate the Markov chain to generate stylized pseudo-random text.

Pricing Strategy Project - Data Analysis   Summer 2018

- Analyzed data of trips and of membership card from all Mobike's oversea users by using Excel; Provided advice for new pricing strategy; increased income and gained more users.

Huffman Coding - Data structure project   Spring 2018

- A processor to compress and uncompress data based on Huffman's algorith: .txt and .html files could be compressed by 40%; .gz, .bz, .zip, .rar could be compressed by 43%; .tif could be compressed 18%

Graph Algorithms - Java project   Spring 2018

- Modeled a directed, weighted graph to rank college football teams for a given season based on wins and margin of victory. Find all weighted shortest paths from the starting vertex to all other vertices in this Graph using Dijkstra's algorithm.

SKILLS

- Programming Languages: Java, SQL, Python, C, C#
- Software: Eclipse, MySQLWorkbench, Visual Studio, Unity, Jupyter Notebook, Excel
- Languages: Chinese(Native), English(Fluent), Korean(Basic)