215-920-7359 **Tian Xue** txuescj@gmail.com

Professional Experience

Technical (University of Pennsylvania Computer Science Course Related) ***(01/2020-present)***

Created a website providing Airbnb & Yelp information (course project) -- SQL, React.js, Node.js, HTML, CSS

- Obtained Airbnb and Yelp datasets
- Cleaned up data: removed irrelevant data, null data and formatted data
- Created Entity Relationship Diagram: Drew ER to better separate tables
- Data separation: split raw data into different tables based on 3NF/BCNF with key-foreign key constraints created. Created SQL database and uploaded to AWS
- Created queries
- Optimized queries: created hash indexes and b+ tree indexes for quality and range search. Used hash indexes to decrease page I/O
- Supported front end development: React.js, Node.js, HTML & CSS

Created an e-commerce website (personal project) – MongoDB, React.js, Node.js, HTML, CSS

- Used HTML, CSS, Node.js and React.js for frontend development
- Integrated PayPal API for payment
- Implemented user signup/login, admin login, user/merchandise/order management and etc.
- Used MongoDB for data storage including merchandise, order, user information and etc.
- Deployed the website

Interactive parking violation data analysis (course project) -- Java

- Cleaned up data: remove irrelevant data, null data and formatted data
- Applied N-Tier Architecture: separated the project into Main, UI, Processor, Data Management and Data packages
- Applied multiple design patterns such as Singleton, Strategy and etc.
- Applied memorization to improve efficiency
- Designed multiple analysis by applying different data structures
- Designed interface for the users to choose which analysis to run and created functionality to log analysis result
- Wrote test cases for unit test

Philadelphia felony vs sports game data analysis (course project) -- Java

- Cleaned up data: remove irrelevant data, null data and formatted data
- Created question set and functions to conduct analysis of the questions
- Created interactive UI to display analysis result by using Jfreechart
- Created test cases for unit test

Network programming (course projects) -- C

- Created multiple small projects including multi-threads, network server end and client end to implement three handshakes and etc.

Other (past) Experience

Academy Sports + Outdoor International Factory Compliance Analyst **(08/2013-06/2020)**

Management Software & Audit Tools

- Led the development and maintenance of the web-based audit management system (MetricStream) through illustrating business needs, setting up workflows, defining fields and values as well as creating data mapping and data feeds.
- Led the development of the new management software (RizePoint). Created Social and Security Compliance audit templates, scoring systems, manual, standards and procedures

Audit, Data Management & Coordination

- Scheduled and reviewed Social Compliance & Security audits.
- Handled Zero Tolerance incidents, e.g. Child Labor

- Conducted regular compliance data analysis
- Coordinate between compliance team and other internal teams to make sourcing decisions
- Conducted industry research and analyses. Attended industry conferences and webinars
- Created training materials and delivered training to both internal teams and vendors and factories

Timeline Consultancy **Technical Specialist & Supply Chain Assessment Manager** **(07/2009-07/2011)**

- Established audit team and provide audit training to auditors
- Developed audit template, manual and field audit instructions
- Created workers satisfaction survey questionnaires
- Assisted data analyst to process and analyze
- Provide consultation to brands and factories. Conduct seminars and onsite training to factory management
- Compiled and translated training materials

Sears Holdings Global Sourcing Ltd Social Compliance (CSR) Auditor **(07/2008-06/2009)**

- Travel intensively to perform CSR field audits
- Carry out the implementation of the company's internal CSR program
- Arranged and conducted training to vendors and factories

A.L.G.I Social Compliance (CSR) Auditor **(06/2006-04/2008)**

- Coordinated and performed CSR audits
- Provide training to vendors and factories on behalf of brands

Education

University of Pennsylvania GPA 3.81 **(01/2020-08/2021)**

Master of Computer Information and Technology

Introduction to Computer Systems, Data Structures & Software Design, Computer Systems Programming, Algorithms & Computation, Database & Information System, Statistics for Machine Learning, Artificial Intelligence, Software Analysis

University of Pennsylvania **(08/2011-05/2013)**

Master of Public Administration with Certificate in Public Finance

Guangdong University of Foreign Studies **(09/2002-06/2006)**

B.A. in English for International Business Management

Skills

Languages

Java, C, C++, Python, JavaScript, HTML&CSS, SQL, MongoDB, Neo4j

Skillset

Data Analysis, Machine Learning, AI/Deep Learning/Neural Network, PyTorch, NumPy