**SKILL:**

**Wei Lu lennonbellaire@gmail.com**

• Programming technologies including Python, Java, JavaScript, Ruby, and C++

• Front-End web development technologies including HTML, CSS, Material UI and BootStrap

• Full stack web development technologies including MEAN stack, MERN stack and Ruby on

Rails

• Database: MS SQL Server, Oracle, MongoDB, and Access

• Cloud infrastructure

• Bilingual in English and Mandarin

**EDUCATION:**

Bachelor of Science in Computer Information Systems, Cum Laude University of Houston, College of Technology, Houston, Texas GPA: 3.67

**JOB EXPERIENCE:**

**TCS (Client: Citigroup) Software Engineer January 2022 – Now**

• The goal of DocHub project is utilizing ETL process to migrate the documents and content from

FileNet IS system to MongoDB and IBM COS.

• **Transformation:** modify the Java code of Crawford call from phase one team to fulfill the requirements for phase two.

• **Transformation:** develop a Python program that takes Crawford process output as input and fetch the metadata of the AFP files then update them in the MongoDB staging collection.

• **Staging:** develop a Python script that cleans up the MongoDB staging collection after all files getting migrated.

• **Load:** develop a Python program that takes reconciliation reports created in transformation process (.csv format) and load into the MongoDB collection named load\_history.

• **Load:** develop a Python program that generates daily migration report and overall migration report based on the data loaded in load\_history and automates the process using AutoSys.

• **CosBucket Cleanup:** make modifications to the CosBucket cleanup python script to delete the records in Amazon S3 storage.

**University of Houston Graduate School assistant October 2018 – December 2020**

• Answering calls regarding questions about UH graduate school applications, transcripts, and

GRE scores

• Duties related to the operation of the Graduate School

**PROJECTS:**

**TCS ILP Training Certification Project July 2021**

• Build a food ordering website using Angular as frontend technology and getting the pre-made data using API calls. The user can view the food details, search for food, order food, check profile and check order status, etc.

• Build a full-stack online shopping web application using modern technologies including Angular, NodeJS, MongoDB, Express and Bootstrap. As a team of four, I oversaw the cart functionality. We designed the user interface using Angular and built the backend server using NodeJS and Express and mongo DB as our database. The user can view product details, search for products, add the product to cart, check out, add product details, edit profile details, and check order status, etc.

**Ruby On Rails Project December 2020**

• Develop a business website for a construction company using Ruby on Rails

• Main page includes the introduction of the company

• Project page includes all ongoing projects with a group of pictures

• Gallery page shows all completed projects with carousel of pictures

• Contact us page includes all relevant information about the company and a “Contact Us” form that takes users inputs and send them to manager’s work email

• Appointment page let the user schedule an open house visit and the information will be sent to manager’s email

**Database Administration and Implementation November 2019**

Part A (database implementation):

• Create a database including 30+ tables using Oracle as the platform based on the Entity

Relationship Diagram given by the instructor (team of 3)

• Assigned primary keys and foreign keys of each table

• Loaded the data into the tables by using SQL Loader

• Created an individual query and a team query based on the business rules of our project

Part B (database performance tuning):

• Created a view for our team query

• Added check constraint and default constraint to the database

• Denormalized the tables to improve database performance

• Created stored procedures to improve database performance and enhance the security level

• Created triggers to input data under certain situations

**Database Management April 2019**

Design and implement a database model for Harmony Landscaping with Java-based GUI. This

application was to manage customer, vendor information/landscaping tools/products, taking product orders based on inventory as well as processing customer orders. The development process are as follows:

• Analyze business requirements

• Create ERD (Entity Relational Diagram) based on business requirements using relational database concept and normalize the tables

• Using native SQL to create/alter tables, assign primary and foreign keys based on business rules

• Load data using Bulk Insert follow all the constraints

• Using native SQL to perform cascading update/delete

• Using native SQL to retrieve data by joining tables, using conditional clauses, as well as ordering, grouping and aggregation functions

• Develop a GUI (Graphical User Interface) using Java and connect it to MS SQL Server database

**System Analysis and Design November 2018**

Design and implement a sophisticated information system for Harmony Landscaping using System Development Life Cycle (SDLC) in group effort. In this application, the employees can view, edit, delete the customers/vendors’ records, and maintain product information. They can also take customer orders, check inventory, and order products if the inventory is low. The business processes are:

• Create records for new customers. Update customer information if the information changes

• Take customers’ orders and route to different personal to handle the orders

• Generate inventory reports to maintain the inventory at certain level

• Generate vendor pricing report to analyze and make decision to order products

• Generate customer order reports to analyze and create preferred customers for offering proper discounts.

**Information Systems Infrastructure and Networks November 2018**

Design a sophisticated data communication infrastructure for an enterprise including 800 hosting servers and 500 virtual servers. The design solution includes:

• Proposed network topology—Include and describe a topology diagram of the proposed network topology. Highlight how the network architecture best fits within the stated requirements and constraints

• Create floor Layout

• Create physical layout

• Network-layer addressing—Include the network-layer addressing scheme, network assignment and masking for LAN, VLAN, and WAN segments, summary addressing points. Include all used network-layer protocols.

• Routing and bridging protocols—Include the recommended protocols to support the applications on the network. Highlight the core, distribution, and access layers of the network design

• Network scalability—Include how the proposed solution will provide room for growth of the

network. Highlight the core, distribution, and access layers of the network design

• Cost assessment—Describe how the customer can save money by purchasing devices that can scale as the company grows

**Internet Application Development April 2018**

Design and implement a web page using HTML, CSS, JavaScript, PHP and MySQL. The website is to take survey form user and save to MySQL database and generate a report. The tasks are:

• User can register on the website and save the user information to MySQL database

• User takes college life survey and save to database

• Generate survey report to see college students’ interest and after-school life

• User can come back and update their information

**Information Systems Application Development April 2018**

Design and implement Graphic User Interfaces (GUIs) to store product information for a cupcake company using JavaFX and connect it to Derby database. The application can:

• Enter cupcake type, flavor, size, etc.

• Edit cupcake information

• Delete cupcake information

**AWARDS:**

**TCS Xccelerate Warrior Certificate January 2023**

**UH College of Technology Dean’s List Fall 2016 – Spring 2020**

**Academic Excellence Scholarship Fall 2015, Fall 2017 – Spring 2018**