Tien(Louis) Lu

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EXPERIENCE

HP, Inc. (HPQ)   **Taipei, Taiwan**   *Oct 2020 - Jul 2023*

Technical lead, Project Newcomen

- Designed and developed **windows applications** with **GUI** using **PyQt5** and **Tkinter**, to collect and reformat clients' data
- Designed and implemented multiple data pipelines to **process semi-structured data** by integrating 50k+ raw records from 40+ data sources daily
- Applied **ARIMA, ETS model**, and statistical indexes to analyze electronic manufacturing **supply linearity** and stability
- Established and maintained a data warehouse on **MSSQL** and **connected 10+ dataflows** to PBI report
- Created reports using **DAX** and Power Query for 100+ clients from **cross-functional team** based on MSSQL data
- Wrote 10+ **web crawling scripts** to repeatedly extracts hub inbound/outbound/inventory data or **user-specified types of reports** using **web-framework, reducing daily manual workload by 60%**
- Designed concurrent web scraping programs using **multi-thread framework**; **improved workflow speed by 50%.**
- **Mentored two junior colleagues,** expanding their skills on data cleansing, pre-process, pipeline development, and visualization skill-sets that **increase team productivity by 20 %**

Software Developer, Project Rixin

- Analyzed and **optimized operational workflow**, developed and deployed Windows applications using Python invoking VBA for **40+ clients**; **reduced process time by 30% and increased team working flexibility and efficiency.**
- Established **virtual environments** for version control and packing; **reduced applications sizes by 80%**
- Managed and executed the **test process,** analyzed system requirements specifications, and developed appropriate test plans and cases; executed test cases and verified actual results with expected results
- **Prepared negative and positive test data** to validate scenarios according to business requirements
- Automated 10+ **ETL** processes across millions of rows of data, **reducing daily manual workload by 30%**

EDUCATION

Georgia Institute of Technology   **Atlanta, Georgia**   *Aug 2023 - Present*

M.S. in Computational Science and Engineering (College of Computing)

- *Expected to take: High-performance Computing, Computational Data Analysis, and Modeling and Simulation*

National Taiwan University   **Taipei, Taiwan**   *Sep 2015 - Jun 2019*

M.E. in Civil Engineering, (GPA: 3.74 (overall), CS-related GPA: 3.97, Rank 23/114)

SKILLS

- **Python:** Used in 5 projects with package including **Pandas, Numpy, threading, Selenium, BeautifulSoup, Request, Pyinstaller, Sklearn, Matplotlib, and Plotly.**
- **Data pipeline: PBI, SQL(MySQL), SQLite, Hadoop, Apache Hive, Apache Pig, Spark**
- **Other:** C++, VBA, Power Automate, HTML, CSS, D3.js, AWS EC2
- **Operating Systems:** MacOS, Linux, Windows