

Hao Wu

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WORK EXPERIENCE

Memorial Sloan Kettering Cancer Center, *Fullstack Software Engineer II*, New York, NY Nov. 2019 – Now

- Lead developed web application DataLine, which used by ~20 analysts daily for research and processing data requests
 - The application is the central hub for data analysts. It generates Excel files from SQL queries, has integration with MS Exchange and version controls for data requests.
 - Using Java Spring Framework, VueJs and SQL Server
 - Setup CI/CD pipelines using Azure DevOps
- Re-architected and developed the in-house ETL / reporting jobs framework
 - Transformed monolithic design to producer & consumer model using queuing system
 - Close to 400 scheduled jobs (SQL, Python) scheduled using the framework
- Co-Developed patients Cohort Builder to serving doctors and researchers within the hospital
 - Implemented authentication and authorization module which integrated with the existing LDAP system
- Co-Developed MSKPYDB, the Python library shared across the company for connecting data warehouses
 - Implemented the database write function in the library
- Using Apache Airflow to build ETL workflows to provide data for reports and Tableau dashboards
 - Built Docker image for running jobs using Airflow's DockerOperator
 - Setup Internal Airflow Server

J.P. Morgan Asset Management, *Software Engineer (Back-end)*, New York, NY July 2018 – Oct. 2019

- Developed portfolio construction / equities analyzation software
 - Using Java, Spring Boot, SQL Server and Elasticsearch
 - Wrote back-end REST APIs and microservices to serve financial data
 - Developed integration testing suites for the web applications
- Developed Natural Language Processing software to parse, analyze companies' published SEC filings
 - Using Python and related NLP libraries
- Improved and maintained legacy software for calculating Alpha models, risk models
 - Wrote SQL queries, stored procedures, batch processes to generate financial reports

Regina Andrew Design, *Database Administrator*, Riverview, MI 2014 –2015

- Developed data analyzation programs for supply chain managements
 - Using Python, ODBC and SQL scripts
- The auto-generated reports have saved more than 30% of the manual calculation works for the purchasing department
- Managed local ERP systems and other database servers for diverse businesses usages

IDV Solutions, *Software Developer Intern*, Lansing, MI 2013

- Produced customized data visualization software solution based on business data
- Developed new mapping features for the GIS software
 - Using C#, SQL Server and SharePoint

EDUCATION

Northeastern University, Boston, MA

Sept. 2016 – May 2018

- *Master of Science in Computer and Information Science*
- GPA 3.42 / 4.0
- Related Courses: Web Development, Computer Networking, Cloud Computing, Network Security, Software Vulnerabilities

Michigan State University, East Lansing, MI

- *Bachelor of Science in Computer Science and Engineering*
- Related Courses: Algorithms and Data Structures, Database Systems, Operating Systems, Software Engineering

TECHNICAL SKILLS

- **Programming Languages:** Java, Python, JavaScript, SQL, HTML, CSS, BASH
- **Frameworks:** Spring, Vue.js, jQuery, Tailwind CSS, Bootstrap, Apache Airflow
- **Databases:** SQL Server, DB2, MongoDB, Elasticsearch
- **Tools:** Git, Docker, Jenkins, Fiddler, Postman, Wireshark, IntelliJ, Vi Editor
- **Cloud Environments:** AWS, Azure DevOps, DigitalOcean, OpenShift