Hao Zeng

Singapore
- Email me on Indeed: http://www.indeed.com/r/Hao-Zeng/9a9bcdf4c8096081

A dynamic and motivated graduate student and data enthusiast majoring in transportation engineering, with 4+ years of hands on experience with skill sets spanning across data analytics, business analytics, business intelligence and engineering.

Willing to relocate: Anywhere

Work Experience

Data Engineer, Intern

Washington State Department of Transportation (WSDOT) - Seattle, WA
June 2018 to March 2019

* Obtained hands-on experience in ERP system through participating in the toll facility vendor collaborated project. Extracted 2K+ abnormal vehicle behaviors from 700K+ vehicle transaction records and developed 20+ calculation views using SAP S/4 HANA modeler for reporting. Drafted and reviewed functional and technical specification documents and testing plans. Utilized AWS EC2 as a cloud provider for transaction records data storage and integrated with SAP Cloud Library for appliance.
* Monitored 10K+ daily toll transaction data from facility operators. Utilized Excel PivotTable to perform data ETL and developed Excel Macros to obtain summary reports that was utilized by senior engineers for monitoring purposes. Collaborated with facility vendors on a regular basis in order to develop reports scheduling of raw toll transaction data in advance of monitoring. Developed monthly tolling business KPI reports utilizing Tableau for data visualization. This enabled the management team to review monthly tolling status.
* Developed SQL queries on a regular basis to address 50+ tolling data-related requests from public users and agencies. Performed data extraction, user behaviors analysis and data validation, which assisted senior engineers in developing a new process to systematically collect on tolling data.

Assistant Planning Engineer

Land Transport Authority - Singapore
July 2014 to August 2017

* Conducted cashflow projection for 30+ infrastructure pipeline projects for bi-annual authority budget practice. Utilized SQL on Microsoft SQL Server to obtain 100+ detailed projection breakdowns from multiple sources. Closely coordinated with internal data providers for budget breakdown verification. In order to enhance the decision-making process for C-level executives, developed data visualization and reporting dashboards for cashflow projection overview utilizing Microsoft Power BI.
* Drafted and prepared 8 business specification requirement documents (BRD) for the Building Information Modelling (BIM) conversion projects, which included business needs and requirements, deliverables frequency and timing, data pre-requisite and data source details.
* Led a team of 8 to complete the in-house Quality and Excellence Search Teams Project. Developed an automated data input process, which improved 60% of the overall efficiency of the cashflow projection process. The achievement was promoted to the National Innovation and Quality Circles Competition and received the Gold Award.

* Evaluated 10+ construction baseline programs for infrastructure and metro stations projects using professional planning software (Oracle Primavera P6). Collaborated with contractors to develop robust baseline programs. Performed scenario studies, claim studies and mitigation plan analysis in the event of potential project delay.

Education

Master's in Transportation Engineering
University of Washington - Seattle, WA
September 2017 to March 2019

Bachelor's in Civil Engineering
National University of Singapore - Singapore
August 2010 to May 2014

National Institute of Applied Sciences of Lyon - Lyon, FR

Skills

SQL (4 years), Business Intelligence (2 years), Excel (4 years), Python (2 years), SAP HANA (2 years), Tableau (1 year), Microsoft Power BI (2 years), Oracle Premavera P6 (3 years), Microsoft Project (3 years), R (2 years), VISSIM (1 year), SAP, Microsoft Office

Links

http://www.linkedin.com/in/jarviszeng

Additional Information

TECHNICAL SKILLS
* SQL Database: SQL Server, PostgreSQL
* Data Visualization: Tableau, Power BI, Microsoft PowerApps
* Data Warehousing: SAP S/4 HANA
* Programming Languages: Python (NumPy, pandas, matplotlib), R (Plotly, dplyr, mlr)
* Statistic Inference Methods: Linear Regression, Logistic Regression, Clustering, Factor Analysis, Chi-square/T test
* Professional Tools: Microsoft Project, VISSIM, ArcGIS, AutoCAD, Oracle Primavera P6

FUNCTIONAL SKILLS
* Work and coordination with multi-disciplinary team
* Project Management, Project Scheduling and Planning, Construction projects tender drafting and evaluation, Project progress control

OTHER INFORMATION
Languages: Bilingual in English and Mandarin; Conversational Proficiency in Cantonese; Basic in French and Japanese