

# JAVEN LAI LE YU

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GitHub: <https://github.com/Javen05> | Portfolio: <https://javen05.carrd.co>

## ABOUT ME

An analytical and detail-oriented individual proficient in Python and SQL, adept at building dashboards and machine learning models for insights, and possesses expertise in the development of operational databases and data warehouses.

## EDUCATION

2022 – present  
(graduating in May 2025)

**Diploma in Big Data & Analytics, Temasek Polytechnic**  
CGPA to date: 3.96 out of 4 (as of semester 2.2)  
Completed key modules:

- Database Application Development
- Data Warehouse and Business Intelligence
- Data Mining and Business Analytics
- Data Analytics & Visualization
- Data Engineering in the Cloud
- Machine Learning for Decision Making

2018 – 2021

**GCE “O” Level Certificate, Tampines Secondary School**  
Obtained 7 credits.

## SKILLS

Technical/Domain Skills

- Performed Data Profiling, Exploration, and Wrangling using Python.
- Created storyboards and interactive dashboards to conduct analysis and deliver actionable insights using Tableau and Power BI.
- Developed Machine Learning models and interpreted them using Feature Importance and SHAP to uncover insights using Python.
- Designed a Data Warehouse that facilitates Business Intelligence analysis using MySQL.
- Built ETL Pipeline that performs data transformations and outputs data to a Data Warehouse using KNIME, Alteryx, and AWS.
- Developed a fully functional backend and frontend for a restaurant review website concept using MySQL, Express, React, and NodeJS.

Generic Skills

- Demonstrated logical thinking and problem-solving by achieving Distinction for Logic & Mathematics and Data Structures & Algorithms.
- Demonstrated interpersonal and teamwork skills by collaborating with diverse teams for school and hackathon projects.
- Demonstrated steadfast commitment to excellence and meticulous time management skills by achieving a 4.0 GPA for an entire year.
- Demonstrated proactiveness in learning and exploring opportunities by participating in hackathons, part-time jobs, and self-directed projects.
- Capable of producing functional code in various programming languages with ChatGPT’s assistance.
- Accustomed to using a variety of software applications for required purposes, from Microsoft Excel to SAS Enterprise Miner.

## WORK EXPERIENCE

Apr 2024 – Oct 2024

**Synapxe**

*Digitalisation of Hospital Operational Processes*

Mar 2023 - Apr 2023

**UPS Supply Chain Solutions**

*Warehouse Assistant*

- Performed data entry using SAP Hana Inventory Management System.
- Transcribed transactional data from invoices into an Excel spreadsheet.

## AWARDS/ACHIEVEMENTS

2023

**Bronze Award** for SUSS Analytics and Visualisation Competition 2023

*Built a Business Dashboard using Tableau to discover insights on Singapore HDB Resale Prices and presented the findings to judges.*

2023

**Bronze Medal** for Poly-ITE Olympiad for Informatics 2023

*Solved problem statements related to data structures and algorithms by writing efficient code.*

2023

**Champion** for Sustainability Campaign Challenge

*Collaborated with a teammate to design and pitch a campaign to reduce the usage of plastic water bottles within Temasek Polytechnic.*

2023

**Director's List Award**

*For being in the Top 10% of the cohort during Year 1 of Polytechnic.*

2017

**Edusave EAGLES Award**

*Demonstrated leadership qualities, service to community and schools, excellence in non-academic activities, and good conduct.*

2017

**SYF Certification of Recognition**

*Created an artifact with CCA members for the 2017 SYF Art Exhibition.*

## CERTIFICATIONS

Sep 2023

Advanced Proficiency in KNIME Analytics Platform (L2)

Sep 2023

Alteryx Designer Core Certification

Nov 2022

NDG Linux Unhatched

## CO-CURRICULAR ACTIVITIES

2022 – 2023

**IT Software Solutions for Business WorldSkills SG**

*Trainee*

- Trained to build an Inventory Management System using ASP.NET Framework with C# and MSSQL.
- Demonstrated commitment to learning new skills beyond Diploma.

2018 - 2021

**MakerFaire**

*Sub-Committee Member*

- Trained in MicroBit programming and drone operation.
- Demonstrated willingness to learn new skills by participating in workshops and hackathons organized by CCA.

## REFERENCE

**Dr. Sathish Sritharan**

Year 1 Care Person, Temasek Polytechnic

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## PROJECTS

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| <b>Data Visualization and Analytics</b> | <p>Interactive Dashboard and Storyboard about OCBC performance:<br/><a href="https://github.com/Javen05/Data-Storytelling">https://github.com/Javen05/Data-Storytelling</a></p> <p>Dashboard about HDB resale prices in Central Area (Bronze Award):<br/><a href="https://github.com/Javen05/Tableau-Hackathon">https://github.com/Javen05/Tableau-Hackathon</a></p> <p>Interactive Dashboard about HDB resale prices:<br/><a href="https://github.com/Javen05/Tableau-Hackathon/tree/improvements">https://github.com/Javen05/Tableau-Hackathon/tree/improvements</a></p> <p>Created a Dashboard to support the problem statement:<br/><a href="https://github.com/Javen05/sustainabilityCampaign">https://github.com/Javen05/sustainabilityCampaign</a></p>                                                                                                                                                                                                                                       |
| <b>Machine Learning (ML)</b>            | <p>Performed supervised and unsupervised ML to derive strategies to improve the operations of a bicycle rental company:<br/><a href="https://github.com/Javen05/Data-Science">https://github.com/Javen05/Data-Science</a></p> <p>Engineered a Random Forest Regressor with business-related features and interpreted the model using SHAP to uncover insights on how factors influence Q4 sales of a retail hypermarket:<br/><a href="https://github.com/Javen05/Machine-Learning">https://github.com/Javen05/Machine-Learning</a></p> <p>Conducted analysis on Corporate Sustainability by building and interpreting supervised ML models on SAS Enterprise Miner:<br/><a href="https://github.com/Javen05/Corporate-Sustainability-Analysis">https://github.com/Javen05/Corporate-Sustainability-Analysis</a></p> <p>Pitched an ML model to predict upcoming cargo traffic:<br/><a href="https://github.com/Javen05/PSA-CODE-SPRINT-2023">https://github.com/Javen05/PSA-CODE-SPRINT-2023</a></p> |
| <b>Data Pipeline + Data Warehouse</b>   | <p>Used Alteryx to perform ETL and store data in localhost MySQL server. Extracted data from Data Warehouse to conduct analysis using Alteryx to provide business insights:<br/><a href="https://github.com/Javen05/DWBI">https://github.com/Javen05/DWBI</a></p> <p>Built an automated Data Pipeline using AWS that stores data in a star schema and hosts a prepared dataset as a public REST API:<br/><a href="https://github.com/Javen05/AWS-Experience">https://github.com/Javen05/AWS-Experience</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Cyber Security</b>                   | <p>CTF experience:<br/><a href="https://github.com/Javen05/CTF-LagNCrash">https://github.com/Javen05/CTF-LagNCrash</a></p> <p>Configuring Windows 10 setup:<br/><a href="https://github.com/Javen05/ISSE-NETY/tree/main">https://github.com/Javen05/ISSE-NETY/tree/main</a></p> <p>Configuring a fully functional (tested using ping, sending emails, and website access) network topology using Cisco Packet Tracer:<br/><a href="https://github.com/Javen05/ISSE-NETY/tree/NETY">https://github.com/Javen05/ISSE-NETY/tree/NETY</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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| <b>Web and App Development</b> | <p>Full Stack restaurant review website using MySQL, Express, React, and NodeJS:<br/> <a href="https://github.com/Javen05/Foodie">https://github.com/Javen05/Foodie</a></p> <p>Streamlit Dashboard system for prediction and analysing sales trends using historical records:<br/> <a href="https://github.com/Javen05/Data-Science-Dashboard">https://github.com/Javen05/Data-Science-Dashboard</a></p> <p>AI Chatbot API for a game using Alibaba Cloud Compute Nest technologies: <a href="https://github.com/Javen05/METAMUA">https://github.com/Javen05/METAMUA</a></p> <p>Telegram Bot that fetches data based on user's responses:<br/> <a href="https://github.com/Javen05/Openfisheries_bot">https://github.com/Javen05/Openfisheries_bot</a></p> <p>Python Autoclicker with different speeds:<br/> <a href="https://github.com/Javen05/autoclicker">https://github.com/Javen05/autoclicker</a></p> <p>Designed a music player app concept using Adobe XD and tried building it on Android Studio using Java:<br/> <a href="https://github.com/Javen05/MYSIC">https://github.com/Javen05/MYSIC</a></p> <p>Robust Tic-tac-toe backend API without frontend interface:<br/> <a href="https://github.com/Javen05/tic-tac-toe">https://github.com/Javen05/tic-tac-toe</a></p> <p>Pitched an Adobe XD app prototype for laypersons to get legal knowledge:<br/> <a href="https://github.com/Javen05/legalsg">https://github.com/Javen05/legalsg</a></p> |
| <b>Miscellaneous</b>           | <p>Documenting and presenting my restaurant review project using Google Sites:<br/> <a href="https://sites.google.com/view/cdev-foodie/home">https://sites.google.com/view/cdev-foodie/home</a></p> <p>Documenting my Chess learning journey using Google Sites:<br/> <a href="https://sites.google.com/view/2202934b/home">https://sites.google.com/view/2202934b/home</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |