Name: Tey Jing Sheng (Singapore Permanent Resident)
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EDUCATION

Nanyang Technological University (NTU)   Aug 2019 – Aug 2023
- **Bachelor of Engineering (Electrical and Electronic Engineering)**
- **Honours (Distinction)**; CGPA: 4.30 / 5.00
- Specialisation: **Info-Communications Engineering (Computer Engineering)**

Virtual Training and Learning & Development
- Udemy Relevant Modules: (1) *The Complete 2023 Web Development Bootcamp*

WORK & INTERNSHIP EXPERIENCE

Azendian Solutions, *Data Engineer*   June 2024 – Present
- Developed and optimized **ETL** processes, automation workflows, and data aggregation scripts using **Python** and **C# (.NET),** contributing to the design of **ETL** and **data lake** pipelines for multiple projects, including Keppel DHCS, NTU SBS Chiller Plant Optimization, Certis, and NUHS.
- Developed scripts for **BacNet** and **OPC UA** communication protocols to Building Management System.
- Implemented complex queries, stored procedures and database management in **PostgreSQL**, **MSSQL** and **MySQL**.
- Developed monthly data visualization reports for clients with **Power BI**.
- Managed code repositories using **GitLab**, ensuring version control and collaboration across development teams.
- Helped to troubleshoot, resolve bugs and maintain **RESTful API** in **JavaScript** for Keppel Chiller Plant web pages.
- Utilized **JIRA** to track and manage bugs and issues effectively.
- Collaborated with the Project Manager to develop Functional Design Specifications, ensuring clear requirements and smooth project execution.

Anacle Systems, *Software Engineer (Full Stack Web)*   Sep 2023 – May 2024
- Proficiently developed web applications using **ASP.NET** framework with **C#** Programming Language.
- Utilized **Object Relational Mapping** (ORM) techniques to query backend **SQL** databases efficiently.
- Proficiently performed direct **SQL** queries utilizing **SQL Server Management Studio** for effective database management and troubleshooting purposes.
- Utilized **GitLab** for managing code repositories, adept at resolving merge conflicts to ensure codebase integrity.
  Work Project: ***Commercial Real Estate Business Unit Team***
- Implemented comprehensive backend logic, **unit testing** scripts and maintained client-facing interfaces, promptly executing logic changes in response to client requests.
- Developed **RESTful APIs** according to client specifications and rigorously tested its functionality using **Postman**.
- Contributed to improving and updating the logic within **SQL** scripts used for data generation, responding promptly to client requests for enhanced data analysis capabilities.

Smart Nation Translational Laboratory, *Research Intern*   Jan 2022 – May 2022
- Assisted urban noise data collation, cleaning, and labelling.
- Gained insights into Remote Microphone Technique, its application and front-end development with MATLAB.
- **Project 1**: Applied **MATLAB Programming** with software "Simulink" to develop Graphical User Interface (GUI) for subjective evaluation of active noise reduction based on sliders at real time audio graphic equalizer.
- **Project 2**: Conducted several experiments to compare loudness between actual microphone and virtual microphone for Remote Microphone Technique to strategize appropriate location for mic implementation.

ACADEMIC PROJECTS / MODULE PROJECTS / RESEARCH EXPERIENCE

NTU Final Year Project: ***Mobile Application Development for Mental Health***   Aug 2022 – Jun 2023
Microsoft Imagine Cup 2023 & Google Solution Challenge 2023 (Team of 4 Members)
- Expected to apply **Dart Programming (Flutter)** to develop front-end development of mobile application with Android Studio and Visual Studio Code to help mental health patients to relax by undergoing recommended well-being activities (e.g., text diary).
- Deployed **Cloud Natural Language API** (e.g., sentiment analysis for emotional score) and **Cloud Firestore** for **NoSQL** cloud-based database.
- Utilized **GitHub** for version control and merging, ensuring seamless collaboration among team members.

NTU-EEE Module: *Web Application Design* Aug 2022 – Dec 2022
Module Project: *Design and Development of E-Commerce*
- Successfully applied <u>4 software programming</u> (i.e., **HTML, CSS3, JavaScript, PHP and SQL)** to develop E-commerce for electronic gadgets webpage with database, cart system, storyboard, and wireframe **(Figma)**

NTU URECA **(Undergraduate Research Experience on CAmpus)** Aug 2021 – Jun 2022
URECA Project: *Design and Build Immersive Game* (Team of 4 Members)
- Contributed to overall game concept and storyline through collective efforts.
- Successfully deployed **C# Programming** (Unity) to create "1st Person Perspective Escape Game" involving movements of drone player and developed in-game inventory system.

NTU Design & Innovation Project**: *Visual Analytic Using Deep Learning*** (Team of 5 Members) Aug 2021 – Dec 2021
- Collaborated with PhD students to use **Python Programming** (Streamlit), Deep Learning and Computer Vision to develop and restructure webpage interfacing.
- Assisted in development of Adjustable Bounding Box with Warning System.

NTU-EEE Module: *Introduction to Data Science and Artificial Intelligence* Aug 2020 – Dec 2020
NTU Module Project: *Are People Living in Developed Countries Happier?* (Team of 4 Members)
- Applied **Python Programming** with two libraries (i.e., NumPy, Pandas) and 3 <u>Machine Learning Models</u> (i.e., Decision Tree, K-means Clustering, Local Outlier Factor) to clean and train Kaggle Dataset for predicting country happiness accurately.
- Concluded that Decision Tree was the ideal model with 90% prediction accuracy that was significantly correlated influencing parameters (e.g., GDP, Life Expectancy)

PART-TIME JOB EXPERIENCE

NTU Asian School of the Environment, <u>*Administration Assistant & IT Assistant*</u> Jul 2020 – **Apr 2023**
- Appointed as **Leader** by Supervisor to manage pool students-assistants with monthly roster updates.
- Performed hard disk changing and disassembling of Apple iMac.
- Assisted to reformat laptops and desktops with Mac OS and Windows installation.
- Inspected and updated faulty electronic devices.
- Performed desktop setups for new professors.

Supermec Pte Ltd, <u>*Administration Assistant*</u> Feb 2019 – Jun 2019
- Awarded <u>*Special Incentive -Token of Appreciation*</u> from Director for <u>*Outstanding Performance.*</u>
- Assisted supervisors to generate daily invoices, sales orders, and delivery orders.

NATIONAL SERVICE & LEADERSHIP

Singapore Armed Forces, <u>*SAF Corporal*</u> **(1st Class) (SG Combat Engineer: 35th Company)** Apr 2017 – Feb 2019
- Assumed role as **Officer Commanding Runner** to support Officer Commanding in outfield missions.
- Recognized as **Outstanding Soldier Awardee**
- Achieved **Outstanding for Conduct and Performance**
- Appointed as **Section Leader**; enhanced leadership by being sensitive to others' needs.
- Trained in operating Morphine-3-Glucuronide (M3G) and General Assault Boat (covering water safety) and gained overseas training experience in Thailand.

SKILLS / HOBBIES

- **Languages**: Fluent in English, Chinese (Mandarin) and Malay
- **Software Programming**: C#, SQL, Python, Dart (Flutter), NoSQL, HTML, CSS, MATLAB, C, PHP
- **Software Applications:** Visual Studio, SQL Server Management Studio, Simulink, Unity, Android Studio, Visual Studio Code, Microsoft Office
- **Version Control:** GitHub, GitLab
- **Licenses**: Class 3 Driving License
- **GitHub**: https://github.com/jingshenggg
- **Hobbies**: Travelling, Playing Badminton, Playing Basketball, Reading