

# Gan Boon Chai Janson

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[LinkedIn](#) | [Portfolio](#)

## Career Summary

Versatile software developer with experience building full-stack applications using React, HTML, CSS, JavaScript, Node.js, and PostgreSQL. Contributed to the mySHAREJourney web and mobile application by delivering responsive, user-friendly features that improved accessibility and engagement. Proficient in Python and SQL for developing data workflows that enhance application insights and decision-making. Detail-oriented and collaborative professional seeking a role that combines software engineering and data engineering to build data-informed applications that drive efficiency and support key business outcomes.

## Professional Development

Generation Singapore (In Partnership with Microsoft and Temasek Polytechnic)

### **Junior Data Engineer Trainee**

**Nov 2025 – Feb 2026**

- Built and validated data pipelines using Python, SQL, and PySpark, where attention to detail was critical for ensuring data accuracy and completeness in every transformation step.
- Designed database schemas and performed ETL tasks by collaborating with teammates to translate business requirements into technical solutions, ensuring project milestones were met on time.
- Developed data models and visual insights using Power BI, enhancing team communication and decision-making through clear, data-driven dashboards.
- Applied structured problem-solving techniques to debug pipeline issues and optimize data workflows, demonstrating personal responsibility and resilience when tackling complex technical challenges.

### **Capstone Project:** [Singapore HDB Resales ETL Project \(Joint Project\)](#)

- Task: Load Phase
- Objectives: Built an end-to-end ETL pipeline to process Singapore HDB resale flat data. Delivered a reliable PostgreSQL database containing clean, structured resale data for analysis and reporting.
- Designed and implemented the Load process to insert transformed data into PostgreSQL.
- Defined and maintained database schema using SQLAlchemy for consistency and scalability.
- Automated table creation and schema validation to reduce manual setup errors.
- Implemented batch loading (5,000 rows per chunk) to optimize performance and handle large datasets efficiently.
- Added logging and error handling to ensure traceability and reliability of data loads.

NTUC LearningHub

### **Desktop Support Engineer Trainee**

**July 2025 – Oct 2025**

- Completed hands-on training in hardware/software troubleshooting and core networking (TCP/IP, Wi-Fi, SOHO), supporting simulated resolution of 20+ common IT issues.
- Gained practical experience in Microsoft 365 Endpoint Administration and Apple device support, managing device policies and security in lab-based environments.

- Applied the FIRE framework to identify and propose improvements to 2 workplace processes through structured problem-solving sessions.
- Used the CENTRIC framework to develop a customer-focused tech solution prototype based on user data and iterative feedback cycles.

**Capstone Project:** [Network deployment, VM deployment, and troubleshooting.](#)

### **Career Break**

**June 2024 – Oct 2025**

- Prioritized health and wellness to ensure readiness for a career transition.
- Completed structured online courses in Python and SQL, building a strong foundation in programming for data manipulation.
- Applied learning by creating a portfolio of Python mini-projects that demonstrate practical problem-solving and coding ability.
- Completed a 3 months Desktop Support Engineer bootcamp, gaining skills in hardware, software, and network troubleshooting to build a comprehensive IT foundation

### **Work Experience**

Activate Interactive Pte Ltd

#### **Programmer Analyst**

**Sept 2022 - May 2024**

- Develop full-stack development of the "mySHAREJourney" application, architecting the React JS & React Native frontend and building the supporting Node.js & Express.js REST API with a PostgreSQL database.
- Translated business requirements into technical solutions, ensuring alignment with stakeholder needs and improving feature delivery accuracy by 15%.
- Collaborated with cross-functional teams (designers, QA, product owners) in an Agile environment, successfully delivering multiple feature iterations within sprint timelines.
- Implemented and executed automated test cases using Robot Framework, increasing test coverage and reducing manual testing effort by 30%.
- Contributed to all phases of the SDLC — from requirements analysis to coding, testing, deployment, and post-release support — gaining comprehensive experience in enterprise-grade application development.

Activate Interactive Pte Ltd

#### **Software Developer Intern**

**April 2022 – Sept 2022**

- Gained in-depth knowledge of React Native and microservices architecture through mentorship from senior developers, strengthening understanding of scalable mobile and backend systems.
- Engaged in Agile ceremonies (daily stand-ups, sprint planning, retrospectives), developing familiarity with the full software development lifecycle and collaborative project management.
- Enhanced technical foundation by exploring modern development practices such as modular service design, API integration, and cross-platform mobile development.

Generation Singapore (In Partnership with Microsoft and Temasek Polytechnic)

#### **Junior Full Stack Developer Trainee**

**Jan 2022 – April 2022**

- Built responsive, component-based user interfaces using HTML5, CSS3, JavaScript (ES6+), and React, focusing on modern frontend development principles

- Built back-end functionality and managed database queries with SQL, practicing personal responsibility in debugging issues and optimizing queries for performance.
- Managed the full project lifecycle using Git and GitHub in a collaborative Agile team, strengthening teamwork and communication through daily stand-ups, peer code reviews, and sprint planning.
- Applied structured time management to deliver individual tasks within sprint deadlines, demonstrating resilience and a growth mindset when troubleshooting complex technical challenges during development.

**Capstone Project:** [Web Development Portfolio](#)

- As part of a collaborative full-stack development team, I was the front-end developer responsible for building and styling the responsive homepage (index.html) for a business website.
- Developed the user interface using HTML, CSS, and JavaScript, ensuring a clean, accessible, and fully responsive design that adapts to different screen sizes.
- Implemented the core content sections, including the business introduction ("Our Shop") and key service listings ("Most Preferred Services")—focusing on clear information architecture and visual hierarchy.

SMRT Buses Ltd

**Bus Simulator Driving Trainer**

**Aug 2017 – Oct 2021**

- Designed and delivered defensive driving curriculum using Unity-based driving simulator scenarios, training 200+ Bus Captains and improving safety awareness scores in post-training evaluations.
- Developed interactive practice modules that reduced simulation errors by 25%, boosting Bus Captain confidence and performance during driving assessments.
- Collaborated with engineers to troubleshoot and resolve 10+ recurring iDSC system issues, increasing simulator uptime to 95% and ensuring smoother training sessions.
- Digitized 3 years of paper-based training attendance records into a structured database using PHP, MySQL(via phpMyAdmin), and built a web-based dashboard (HTML, JavaScript, CSS) to visualize statistics — reducing manual tracking time by 50% and enabling real-time performance insights.

**Projects:** Singapore 2019 ITS World Congress, Smart Nation & U Exhibition

**Oct 2019 – Dec 2019**

- Conducted daily testing of Autonomous Vehicle (AV) systems, ensuring responsiveness to simulated threats and safety scenarios.
- Evaluated AV performance metrics during testing and provided structured feedback to research teams and engineers, contributing to iterative improvements.
- Demonstrated AV capabilities to 500+ exhibition visitors, showcasing smart mobility innovations and supporting public engagement with emerging technologies.

Singapore Technologies Kinetics Ltd

**Driving Trainer**

**Mar 2012 – July 2017**

- Educated 500+ NSF trainees on the structure and features of Class 3 and Class 4 military vehicles, improving technical understanding of vehicle components and operational readiness.
- Delivered defensive driving and traffic rule training, reducing accident risk during training exercises and strengthening safety culture among new drivers.

- Trained recruits in fundamentals of driving across both road and off-road terrain, increasing trainee confidence scores in evaluations and ensuring operational competence in diverse environments.
- Maintained and monitored training equipment and resources, ensuring 100% availability during scheduled sessions and minimizing downtime.

Singapore Bukit Batok Driving Centre

**Driving Instructor**

**Apr 2011 – Feb 2012**

- Conducted 300+ theoretical and practical driving lessons for motorcar learners, ensuring comprehensive coverage of road rules and vehicle operation.
- Guided and motivated 50+ assigned students to achieve their driving goals, contributing to a high pass rate in licensing examinations.
- Promoted safe and defensive driving habits, reducing training related incidents and strengthening learner confidence on both urban and highway roads.
- Maintained training equipment and resources to 100% operational standards, ensuring safety compliance and uninterrupted lesson delivery.

Early Career (Condense Summary, 1997 – 2011)

- **Sales & Customer Service:** Sales Executive at BKW Rent A Car, supporting rental operations, client relations, and contract management.
- **Hospitality:** Front Office Executive at Hotel 81, managing guest check-ins, reservations, and customer service.
- **Retail Sales:** Sales positions at Citimac Electronic, Lomax Electronic Enterprises, Mobile Storm, and Max Group companies, where responsibilities included customer engagement, product demonstrations, and achieving sales targets.
- **Transportation & Logistics:** Driver roles at Pet Movers Singapore, Mexsim Enterprise, KM Construction, and Skywave (Driver cum Technician), ensuring safe and timely delivery of goods and services.

**Professional Certification**

Creative Thinking (Intermediate)	Attained: July 2025
Problem Solving (Intermediate)	Attained: July 2025
AWS Certified Cloud Practitioner	Attained: Sept 2023 – Expired Sept 2026
ISTQB Foundation Level	Attained: April 2023
Implement Operations for Service Excellence	Attained: Nov 2017

**Education**

Singapore GCE 'O' Level	Bendemeer Secondary School – 1991
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