

Bernard Cheng Zheng Zhuan

Email: bernardchengzz@gmail.com | LinkedIn: [Profile](#) | Website: bernardcheng.github.io

EDUCATION

National University of Singapore

- Master of Computing (Artificial Intelligence Specialization)
- Expected Graduation: Dec 2025

Singapore

Aug 2023 to Present

Singapore University of Technology and Design

- Bachelor of Engineering (Engineering Systems and Design), Honours
- Focus Track: Business Analytics

Singapore

May 2016 to Sept 2019

RELEVANT WORK EXPERIENCE

Bank of Singapore

Data Analyst (Compliance Transformation – AI & Data Analytics)

Singapore

Aug 2022 to Present

- Developed an award-winning analytics dashboard that enabled senior management to effectively monitor high-risk clients across various BOS entity offices and hubs, enhancing decision-making and risk management.
- Played a key role in the successful migration of private banking clients' risk scoring data by developing and testing automation scripts in Python to ensure critical client data remained unaffected post-risk scoring engine updates.
- Overhauled legacy Excel-based BAU reports by designing Power BI dashboards and Streamlit data applications to improve data visibility and accessibility of key client and transactional data for key compliance functions.

NCS Pte. Ltd.

Data Engineer (Contract)

Singapore

Feb 2022 to Jul 2022

- Developed automation scripts for interface file identification data transfers across different government agencies using SQL, SAS BASE, bash scripting, and data pipeline tools (SAS Enterprise Guide and Data Integration Studio)
- Designed interactive diagnostic dashboards using SAS Visual Analytics for daily monitoring of critical ETL transfers across various government agencies.

Synpulse Singapore Pte. Ltd.

Associate Consultant (Private Banking)

Singapore

Oct 2019 to Aug 2021

- Prototyped innovative and scalable financial products (Community cashback card, Flexible Loan scheme) for digital banking sales initiatives using Thought Machine smart contracts (Python).
- Supported an international bank in test management of its internal core banking platform roll-out in Singapore and Hong Kong. Achieved 80+% testcase success rate by employing efficient measures (JIRA Dashboarding, performance reporting automation using Python) to ensure clear and timely reporting standards.

Television Content Analytics (TVCONal)

Data Scientist (Video Analytics)

Singapore

May 2018 to Jan 2019

- Co-authored and published IEEE computer vision research paper ([Paper ID: BigD568](#)) on applying transfer learning models to enable real-time player recognition & event detection in cricket broadcasting applications
- Researched custom image processing techniques to improve custom hybrid model accuracy performance by 20%
- Developed company's contract log with auto-sync functionality between Google Sheets and Calendar using Google Apps Script (JavaScript) to fully automate existing time scheduling processes.

INDUSTRY PROJECTS (Singapore University of Technology & Design)

Final Year Capstone Project

AI Application for Maritime Industry (Alpha Ori Technologies Pte Ltd.)

Jan 2019 to Aug 2019

- Developed front-end web portal using Flask web framework with AWS cloud integration (S3, EC2)
- Designed custom U-Net convolutional neural network architecture in TensorFlow Lite for image segmentation
- Effective stakeholder management to ensure alignment of deliverable timeline with business needs & resources

Data & Business Analytics Module

Correlation Between Passengers' Feedback & Cabin Crew Performance (SIA)

Sep 2017 to Dec 2017

- Developed predictive models to forecast feedback frequency based on crew's demographics & appraisal scores
- Identified insights of best & bottom performing crews' characteristics using natural language processing techniques in R to develop programme recommendations for training program improvements
- Designed and optimised the SQLite database schema for efficient querying of customers' past feedback data