



VEHICLEVERIFY: SMART VEHICLE DATA VALIDATION

Solving Malaysian Insurance Application Errors with AI

Presented By

Team CacheMe

Date

6 September , 2025



OUR TEAM



ELDEENA LIM

Machine Learning Specialist



KONG YI XUAN

Frontend Developer



DO WAI LUNG

Backend Developer

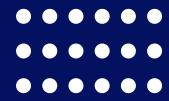


BECKHAM WONG

Data Analyst



CULTURAL INTELLIGENCE MEETS PATTERN RECOGNITION



- 01 Detects reversed spellings:
“audoreP” to “Perodua”
- 02 Recognizes substitutions:
“TOyOta” to “Toyota”
- 03 Smart year validation:
Flags 1800, 2099 as
impossible
- 04 Educational feedback vs
generic error messages



PROTOTYPE LINK: [HTTPS://TOFU-HERO-35863024.FIGMA.SITE/](https://TOFU-HERO-35863024.FIGMA.SITE/)





TECHNICAL FEASIBILITY



Frontend

React 18 + TypeScript



Backend

Node.js + MongoDB



AI

Python scikit-learn

Smart Insurance Data Validation

Step 2 of 5: Brand & Model Entry

Smart Brand and Model Entry

Our system recognizes typos and suggests corrections based on real user patterns

Errors Prevented:

- Brand spelling corrected: "Hond" → "Honda"

Vehicle Brand

94% confidence

Enter vehicle brand

Hond



Did you mean "Honda"? (94% confidence)

Suggestions:

Honda

Vehicle Model

Enter vehicle model

e.g., Civic

Popular Honda models:

Civic City Accord HR-V





**Dataset shows 76.5% error rate
(153 of 200 applications)**



Our solution prevents common mistakes before submission



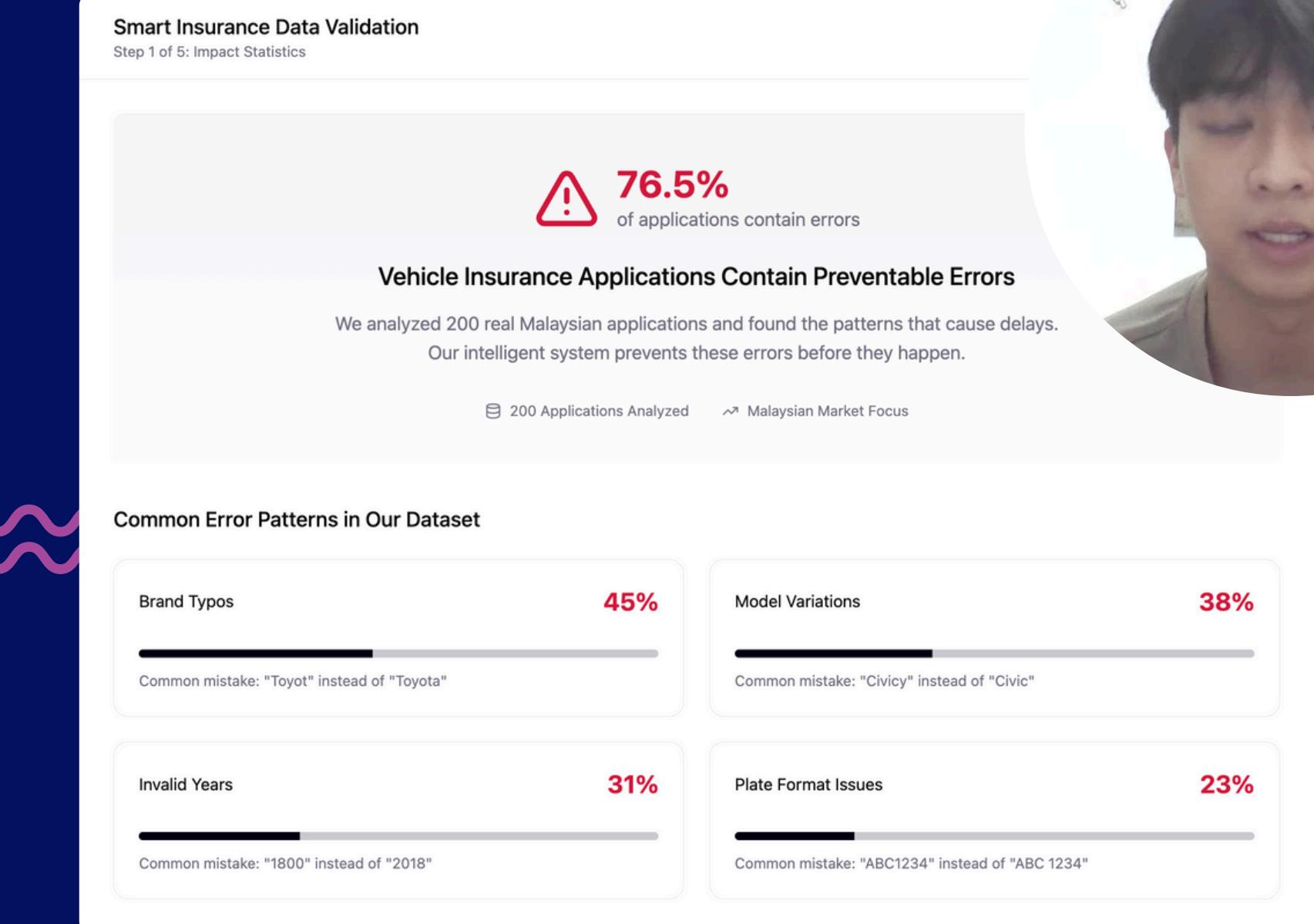
Users get immediate helpful suggestions instead of rejections



Addresses the most frequent error patterns we identified

PROBLEM IMPACT

Helping Users Avoid Frustrating Errors



IMPLEMENTATION READINESS



Smart Insurance Data Validation
Step 4 of 5: License Plate

License Plate Format Intelligence
Automatic formatting and OCR error correction for Malaysian plates

License Plate Number Car 100% confidence

Enter license plate number ABC 1234 ✓

Valid car plate format

Scan Document Example

Malaysian Plate Formats

- Standard Car Plates**
 - ABC 1234 (3 letters + 4 numbers)
 - AB 123A (2 letters + 3 numbers + 1 letter)
 - A 123 (1 letter + 3 numbers)
- Motorcycle Plates**
 - AB 1234 (2 letters + 4 numbers)
 - ABC 123 (3 letters + 3 numbers)
- Special Plates**
 - HA 1234 (Taxi - starts with H)
 - JA 1234 (Government)



Smart Insurance Data Validation
Step 3 of 5: Year Validation

Year Validation with Database Integration
Cross-referenced against our comprehensive vehicle production database

Vehicle Year 100% confidence

Enter manufacturing year 2018 ✓

Year validated against production database

Production Timeline

Honda Civic
Production Started: 2000
Production Ended: Ongoing

Available Years:

2025	2024	2023	2022	2021
2020	2019	2018	2017	2016

Interactive prototype proves concept works



Competition dataset provides training foundation



Clear development roadmap eliminates risks



Team expertise matches technical requirements perfectly





THANK YOU FOR YOUR ATTENTION



Prototype Link: <https://tofu-hero-35863024.figma.site/>

