



Vision Dealer Solutions is a Fort Wayne, Indiana-based software development company serving the automotive sales industry. The company provides digital finance and insurance (F&I) solutions for automotive, RV, and powersports dealerships. Its platforms include electronic signatures, digital menu presentations, remote retailing, reporting dashboards, and AI-powered workflow tools designed to streamline operations, enhance customer engagement, support regulatory compliance, and improve business performance. Serving more than 3,000 dealerships nationwide, the company focuses on delivering fast, customizable, and integrated digital retail experiences.

# Enhancing Automotive F&I Purchase Probability Models

The study aims to improve prediction accuracy for 13 aftermarket product categories offered during vehicle transactions. It evaluates additional behavioral and situational factors, along with dealer feedback, to better capture customer purchasing decisions beyond the current demographic, vehicle, and dealer-structure data. These enhancements are expected to improve recommendation accuracy, dealer performance, and customer experience.

**Keyword:** Machine Learning, AI, Sales Predictive Analytics

**Tools/Skills:** Python, PyTorch, TensorFlow, Microsoft SQL, Docker

**Citizenship Status:** Open to all students

