The Master of Technology in Artificial Intelligence Systems at NUS ISS offers a transformative curriculum that uniquely aligns with my ambition to pioneer intelligent driving solutions. By engaging with **Machine Reasoning** and **Cognitive Systems** in AI laboratories, I will refine my ability to design decision-making architectures that simulate human-like situational awareness – a cornerstone for autonomous vehicles navigating dynamic environments. Courses like **Intelligent Sensing and Sense Making** and **Spatial Reasoning from Sensor Data** will deepen my expertise in multi-modal sensor fusion, enabling precise real-time environmental modeling critical for self-driving perception systems. Through **Developing Autonomous Robots & Vehicles** and **Robotic Systems**, I plan to prototype scalable navigation algorithms in lab settings, integrating **Pattern Recognition and Machine Learning Systems** to optimize obstacle detection and path planning. Meanwhile, **Vision Systems** and **Real-Time Audio-Visual Sensing** will empower me to engineer robust vision pipelines for interpreting traffic scenarios. The program’s emphasis on **Explainable & Responsible AI** ensures my technical rigor remains ethically grounded, vital for deploying trustworthy autonomous systems in public domains. By synthesizing these competencies within NUS’s innovation-driven AI ecosystem, I aim to bridge cutting-edge research with industrial applications, advancing intelligent mobility systems that harmonize safety, efficiency, and human-centric design.