

**Lewis University**  
**STEM Undergraduate Research Experience (S.U.R.E.)**  
**2020**  
**Faculty Mentor - Project Application**

Dr. Mahmood Al-khassaweneh  
Department of Computer and Mathematical Sciences  
Lane Departure Warning System

January 17, 2020

**Abstract**

Automobiles have been an essential tool of transportation for every family, but at the same time, the road safety issue has become the focus of attention. To reduce traffic accidents, people have enacted laws that limit the speed of cars, but the problem has not been fundamentally improved. Consequently, the researchers have developed advanced driver assistance systems. The system includes an Active Cruise Control system, Collision warning system and Lane departure warning system. The proposed algorithm aims at developing an auto driver assistance system that warn drivers of possible lane departures in real-time using simple camera.