

ABSTRACT:

A novel approach to tackle various inefficiencies of the modern day Vehicle-to-Vehicle communication technology, specifically the modern-day implementation using the Automotive-Grade Linux.

The project begins with sampling the actual hardware and software deployed by the leading manufacturers and industry, highlighting use-cases like the Toyota Prius, Tesla Model S, and Reva employing an ECU approach, and concludes with delivering optimizational remedies.

Keywords:

Automotive Communication Networks; Decentralized Communications; In-Vehicle Networking; Hybrid Platooning; S.M.A.R.T. Automobile Clustering;

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LIST OF ABBREVIATIONS

S. No.	Abbreviated Form	Long Description.
	CAN	Controller Area Network
	AGL	Automotive Grade Linux
	V	Vehicle
	N	Node
	V2V	Vehicle to Vehicle
	ECU	Electronic-Engine Control Unit
	O.S.S.	Open Source Software
	R.O.L.L.	Routing over Low PAN & Lossy Networks
	VHF	Very High Frequency
	VM	Virtual Machine
	HVAC	High Voltage A/C
	GIS/GPS	Global/Geospatial Information/Positioning System