

Faculty Profile

Dr. Raja Vidya, an Assistant Professor with a strong zeal for research and development in Electric Vehicles (EVs). Her expertise spans motors, controllers, and charging technologies, extending to Autonomous Vehicles and other challenging fields. She is dedicated to advancing sustainable and intelligent mobility solutions.



Personal Information

- **Name:** Dr. RAJA VIDYA
- **Designation:** Assistant Professor
- **Department:** Electrical and Electronics Engineering
- **Email:** rajavidya@rvce.edu.in
- **Phone:**

Google Scholar: <https://scholar.google.com/citations?user=fFAHMYAAAAJ&hl=en>

ResearchGate: https://www.researchgate.net/profile/Raja-Vidya?ev=hdr_xprf

LinkedIn: www.linkedin.com/in/vidya-raja-186a03120

ORCID: <https://orcid.org/0000-0001-9610-6085>

Domain of Expertise

Research Focus

- **Primary Area:** Electric vehicles, Batteries, Battery Management, Charging Infrastructure, Wireless Charger for EVs, Motor Controllers.
- **Allied Areas:**
 - Autonomous Vehicles, Sensors
 - Electric motors, High Frequency Inverters, EV Simulators

Academic Qualifications

- **Ph.D.:** Electrical Engineering, VTU, 2025
- **M.Tech:** VLSI Design and Embedded Systems, VTU, 2010
- **B.E./B.Tech:** Electrical and Electronics Engineering, Kuvempu University, 2001

Professional Experience

Experience

S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RV College of Engineering, Bengaluru	Assistant Professor	28.09.2016 to till date
2.	KS School of Engineering and Management, Bengaluru	Assistant Professor	22.01.2015 to 21.09.2016
3	Nichepro Technologies Pvt Ltd	Specialist TAC	03.02.2011 to 19.12.2014
4	RV College of Engineering, Bengaluru	Lecturer	03.02.2004 to 31.08.2006

Publications & Patents

Journal Publications

1. Vidya R, Keshavan BK. Optimizing performance parameters of stationary wire free power transfer circuit. International Journal of Power Electronics and Drive Systems (IJPEDS). 2023 Sep;14(3):1309-21.
2. Raja Vidya, “Battery Charging Techniques for an Electric Vehicle — A Comprehensive Survey”, GIS Science Journal, ISSN NO: 1869-9391, Vol 8, Issue 12, Pg No: 1238-1246.
3. Raja Vidya, B.K Keshavan, “Coil Design for A 3.7kW WPT Electric Vehicle Charger”, GRENZE International Journal of Engineering and Technology, Vol 8, Issue 2, Pg No 1016-1027.
4. Raja Vidya, Uma Rao.K, presented a poster on “The Future of Wireless Power Transfer To Charge EVs”, Second National Power Engineering Research Scholars Feb 24 -25, 2018 at IIT Chennai.
5. Raja Vidya, Uma Rao K, presented a poster on“ IoT Application for Vehicle Management and Infrastructure Design to Promote Electric Vehicles”, Workshop on 'Battery Technologies and Electric Mobility' March 08 - 09, 2018 at HP Green R&D Centre, HPCL, Bengaluru.
6. Raja.Vidya, Gousia Sultana, “Design and Deployment of Embedded Wireless Vehicle Monitoring System Using GPRS”, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, ISO 3297: 2007, Vol. 5, Issue 6, June 2016.
7. Gousia Sultana, Raja Vidya, “Microcontroller Based Assembly Check and Built-In Self Test”, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, ISO 3297: 2007, Vol. 5, Issue 7, July 2016.

Conference Papers

1. Vidya R, Kumari U, Sridhar R, Dhanush SR, Sharma SJ, HS UV, Prajwal BG. State-of-Charge Estimation Methodology for Lithium-Ion Batteries Utilizing Extended Kalman Filtering. In2023

7th International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS) 2023 Nov 2 (pp. 1-5). IEEE.

Patents **[Filed / Published / Granted]**

Name: WiCharge - Wireless Charger for Electric Vehicle.

Status: Filed

Year: 2025

R & Grants & Consultancy Projects

Ongoing & Completed Research Projects

- **WIPRO IISc Research and Innovation Network - WIRIN** – Funding Agency: WIPRO, Duration: 2020 – 2025, Role: Coordinator
- **Development of a Solenoid Valve for Pneumatic Actuation System in Seed Segregation** – Swan Sorter Pvt Ltd, Duration: 2024 – 2025 Role: PI.

Professional Memberships

- IEEE

Awards & Recognitions

Excellent Performer Award 2023 – 24 and 2021-22 from RSST Trust for Excellent performance and contributions (Prism Cycle).

Student Supervision

- Ph.D. Candidates: Nil
- M.Tech/M.Sc. Students: 6
- Undergraduate Research Mentees: 50

Teaching

Core Courses: **[Current semester]**

EE123AT – Basics of Electrical Engineering

E Mobility, EVs and HEVs, ADDC, Electrical Machines

- **Advanced/Lab Courses:**
- EV Lab – in Association with Visionastra EV Academy

- CoE – Connected Autonomous Electric vehicles

Professional Roles

Responsibilities

- **Academic:** CIE Coordinator, Dept Library, Dept Quiklrn, Innovative Clubs
- **Administrative:** Coordinator – Coe Connected Autonomous Vehicles and EV Academy, ADDC Lab in charge.