# Rakesh Mahto

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## Education

### PH.D. | SUMMER 2016 | UNIVERSITY OF NEW MEXICO, ALBUQUERQUE, NM

- Major: Computer Engineering
- Minor: Computer Architecture and VLSI Design.

### M.S. | SPRING 2009 | CALIFORNIA STATE UNIVERSITY, FULLERTON, CA

- Major: Electrical Engineering
- Minor: Computer Engineering

### B.E. | SPRING 2005 | VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT, INDIA

- Major: Electrical Engineering

## Academic Experience

### ASSOCIATE PROFESSOR | AUGUST 2022- PRESENT

- Department of Electrical and Computer Engineering
- California State University, Fullerton, CA

### ASSISTANT PROFESSOR | AUGUST 2016 – JULY 2022

- Computer Engineering Program
- California State University, Fullerton, CA

### TEACHING ASSISTANT | AUGUST 2009 – MAY 2016

- Electrical and Computer Engineering Department
- University of New Mexico, Albuquerque, NM

## Grant Awarded

- Titan Research Immersion: Empowering Diversity in Chip Design, AI FAST Challenge, Foundation for California Community Colleges [PI; $150,000], February 2025 – August 2026.
- Electric Vehicle (EV) Engineering Certificate Program, CPaCE Accelerator Grants program 2023-2024 [Co-PI; $50,000], May 2024 - June 2026.
- CPS: Medium: Leveraging Machine Learning to Detect Fault Conditions to Improve Power Management in Photovoltaic Systems, NSF [Co-PI; $666,528], May - 2024. (pending)
- Engaging Graduate Students in Research, Scholarly, and Creative Activities (EG-RSCA) Program [PI; $5,000] June 2024 – December 2024.
- ECS Incentive Grant [PI; 3 WTUs Release Time] May 18, 2024 - December 20, 2025.
- Research, Scholarship, and Creative Activity (RSCA), CSUF [PI; $15,000], June 2024 - December 2025.
- LUMINATE, CSU Creating Responsive, Equitable, Active Teaching and Engagement (CREATE) Awards, CSU Office of the Chancellor [PI; $108,242], August 2023 – August 2024.
- ORSP Advanced Grant Writing Academy [PI; $4,000], June 2023 - May 2024.

- Summer Undergraduate Research Academy (SUReA) [PI; $3,000], June 2023 - December 2023.

## Publications (recent)

- R. Mahto, and K. Sood, “Predicting Cervical Cancer Based on Behavioral Risk Factors.,” International Journal of Advanced Computer Science & Applications, vol. 15, no. 11, 2024.
- J. Olivares, T. Depe, and R. Mahto, “Reconfigurable Battery Systems for Enhanced Fast Charging in Electric Vehicles,” IEEE 15th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), Berkeley, USA, 2024. (in-press)
- A. Martinez, K. Sood, and R. Mahto, “Developing a Machine Learning Model to Identify At-Risk Students,” 20th International Conference on Frontiers in Education: Computer Science & Computer Engineering (FECS’24), Las Vegas, USA. (in-press)
- J. Olivares, T. Depe, K. Sood, and R. Mahto, “Predictive Modeling of Shading Effects on Photovoltaic Panels Using Regression Analysis,” The 26th International Conference on Artificial Intelligence (ICAI’24), Las Vegas, USA. (in-press)
- J. Dofe and R. Mahto, “Securing Photovoltaic Panels: A Survey,” 2024 IEEE 17th Dallas Circuits and Systems Conference (DCAS), Richardson, TX, 2024, pp. 1-6,doi: 10.1109/DCAS61159.2024.10539868.
- R. Mahto and K. Sood, "Advancing Occupancy Detection Through Deep Learning and Sensor Integration," 2024 IEEE 14th Annual Computing and Communication Workshop and Conference (CCWC), Las Vegas, NV, USA, 2024, pp. 0278-0284, doi: 10.1109/CCWC60891.2024.10427778.
- R. Mahto and K. Sood, " HIV Progression and Outcome Prediction to Enhance Patient Matching for Clinical Trials," 2024 IEEE 14th Annual Computing and Communication Workshop and Conference (CCWC), Las Vegas, NV, USA, 2024, pp. 0278-0284, doi: 10.1109/CCWC60891.2024.10427778.
- P. K. Mandal and R. Mahto, "Deep Multi-Branch CNN Architecture for Early Alzheimer’s Detection from Brain MRIs," Sensors, vol. 23, no. 8192, 2023. Available: https://doi.org/10.3390/s23198192.

## Professional Service

- Review Editor on the Editorial Board of Energy Efficiency Applications (specialty section of Frontiers in Energy Efficiency)
- Topical Advisory Panel for MDPI Electronics Journal.
- Technical Program Chair – IEEE Conference on Technologies for Sustainability (SusTech 2022).
- Reviewer board - Journal of Low Power Electronics and Applications, and MDPI Signals.
- Technical committee - IEEE ISQED (2020), IEEE Sustech (2020), IEEE ICCC (2019), and ITNG (2020, 2019)
- Reviewer for IEEE Design Automation Conference, IEEE International Symposium on Quality Electronic Design, IEEE Translations of Electron Devices, MDPI Open Access Journal - Electronics, Journal of Low Power Electronics and Applications (JLPEA), IEEE Power and Energy Conference – 2019 and others.

## Award (recent)

- Faculty Recognition for Excellence in Scholarly and Creative Activity (Fall 2024).
- Best Paper Presentation Award IEEE IEMCON 2024, and IEEE IEMCON 2022.
- PI Award (Spring 2024)
- Faculty Recognition Award- Teaching (Fall 2020).
- Faculty Advisor of Distinction (Spring 2019).