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

- ECS Incentive Grant [PI; 3 WTUs Release Time] May 18, 2024 Dec 20, 2025.
- Research, Scholarship, and Creative Activity (RSCA), CSUF [PI; \$15,000], June 2024 December 2025.
- LUMINATE: Leveraging Machine Learning/Artificial Intelligence for Responsive and Equitable Teaching and Engagement, CSU Creating Responsive, Equitable, Active Teaching and Engagement (CREATE) Awards, CSU Office of the Chancellor [PI; \$108,242], April 2023.
- · ORSP Advanced Grant Writing Academy [PI; \$4,000], June 2023 May 2024.
- · Summer Undergraduate Research Academy (SUReA) [PI; \$3,000], June 2023 December 2023.
- Summer 2022 Grant for Faculty Support on Scholarly or Creative Productivity [PI; \$5,000], June 2022 December 2022.
- Research, Scholarship, and Creative Activity (RSCA), CSUF [PI; \$15,000], June 2022 December 2022.

Publications (recent)

- J. Dofe and R. Mahto, "Securing Photovoltaic Panels: A Survey," presented at the 17th IEEE Dallas Circuits and Systems conference, Dallas, Texas, 2024.
- 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, "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.
- D. Sharma, <u>R. Mahto</u>, Q. Sun, R. Jin, and M. Rastogi, "Artificial Intelligence and Simulated Virtual Models in Teaching Construction Courses," in Construction Research Congress, 2024. Available: https://doi.org/10.1061/9780784485293.036
- R. Mahto, K. Sood, and N. Ruppert, "Random Forest Empowered Shade and Fault Detection in Photovoltaic Panel," in 2023 IEEE UEMCON, New York, USA, Oct. 2023, pp. 8.
- R. Mahto and K. Sood, "Harnessing the Power of Neural Networks for Predicting Shading," 2023 IEEE GHTC 2023, Radnor, USA, Oct. 2023, pp. 7.
- · <u>R. Mahto</u>, D. Sharma, D. Xavier and R. Raghavan, "Improving performance of photovoltaic panel by reconfigurability in partial shading condition," J. Photon. Energy 10(4), 042004 (2020), doi: 10.1117/1.JPE.10.042004.

Professional Service

- 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), MDPI Open Access Journal (Sustainability), MDPI Open Access Journal Applied Science, MDPI Open Access Journal (Energies), MDPI Open Access Journal (Computers), IEEE Power and Energy Conference 2019, International Journal of Modeling and Simulation.

Award

- · PI Award (Spring 2024)
- · Faculty Recognition Award- Teaching (Fall 2020).
- · Faculty Advisor of Distinction (Spring 2019).
- · SPIE travel grant (Spring 2016).
- Doctoral conference presentation award, Graduate studies office UNM (Spring 2016 and Summer 2016).
- Graduate Assistantship; University of New Mexico, Albuquerque and University of Tennessee, Martin.