



Zarheer Jooma

Partner, Professional Engineer (PE)

Zarheer Jooma is a professional engineer and partner at e-Hazard with extensive electrical safety experience across Northern America, Africa, Middle East, and Europe. He has worked in diverse industrial environments, supported government agencies, and is known for his hands-on approach to arc flash studies.

He holds a master's degree (with Distinction) in Electrical Engineering, is a senior IEEE member, and serves on ASTM F18, IEC TC-78, and the IEEE 1584 working groups. Zarheer chairs ASTM F18.93, helps lead the IEEE Electrical Safety Workshop, and has published multiple papers. He teaches NFPA 70E and OSHA 1910 training classes and regularly serves as an expert witness in electrical safety cases. Zarheer has received a Prized Paper Award by the IEEE. In 2026, he received the Technical Achievement Award for extraordinary technical leadership. Zarheer served as the chair of the IEEE IAS Electrical Safety Workshop in 2025. He is the Papers Review Chair for all Electrical Safety related papers for the two IAS Journals.

Career Highlights

e-Hazard **2008 – Present**

Partner, Electrical Engineer
Louisville, KY 2016

- Writes electrical safety standards, performs accident investigations, company specific written Electrical Safety Programs, and Electrical Safety Audits

South Africa – Johannesburg 2008

- Principal Engineer and Owner-Operator of the training/consulting company
- Provides electrical safety training, arc flash assessments, and support services to promote and facilitate the safety efforts of client companies throughout the country

ArcelorMittal South Africa – Johannesburg 2007-2016

Progress Engineering Manager – Infrastructure

- Engineering, introduction of standards and technologies, preventive maintenance, and upkeep

Eskom Generation – Lethabo Power Station 2000-2006

Electrical Engineer

- System Engineer for electrical plant and substations

South African National Standard (SANS) 724

- Drove the effort to develop electrical safety standards in South Africa; convened and served as chair of the committee for SANS 724 – *Personal protective equipment and protective clothing against the thermal hazards of an electric arc*

Education & Certifications

University of Natal, Durban Campus B.S., Electrical Engineering, Power Option

University of Witwatersrand M.S., Electrical Engineering, Electrical Arc Flash Safety

Snapshot

Focus

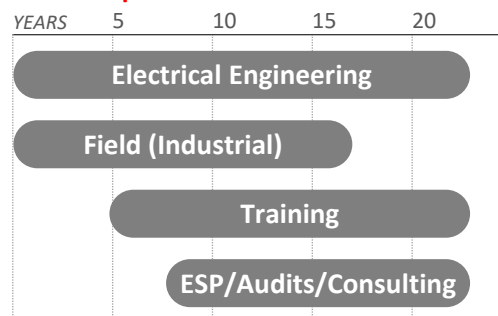
SERVICES

- Arc Flash Studies
- Investigations
- Electrical Safety Programs
- Audits

TRAINING

- Low Voltage
- High Voltage
- Utilities
- Train the Trainer
- Customized

Career Experience Timeline



Licenses & Professional Memberships

Professional Engineer, Registered in Kentucky, New York and South Africa

Institute of Electrical and Electronics Engineers (IEEE), Senior Member

ASTM Committee F18, Executive Committee, Chair of F18.93

IEC TC78 – Live Working, Member



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Publications

- “Variabilities in Electrical Arc Flash Protection,” Incident-Prevention.com, Variabilities in Electrical Arc Flash Protection - Incident Prevention, Zarheer Jooma, P.E., Brian Shiels, & Stacy Klausing, M.S., June 10, 2025.
- “Artificial Intelligence in Electrical Safety: Now and the Future”, Jay Prigmore and Zarheer Jooma, IEEE IAS Electrical Safety Workshop (ESW) 2025.
- “Variabilities in Electrical Arc Flash Protection,” Incident-Prevention.com, Zarheer Jooma, Brian Shiels, & Stacy Klausing, M.S., June 10, 2025.
- “Role Specific Approaches for Incident Investigation,” Zarheer Jooma and Jay Prigmore, IEEE IAS Electrical Safety Workshop (ESW), 2024.
- “Hand Protection for Electrical Shock and Arc Flash Hazards,” Hugh Hoagland and Zarheer Jooma, BSEE, M.S. October 1, 2024.
- “Ask Me Anything: Electrical Safety with Zarheer Jooma,” Occupational Health & Safety webinar, August 20, 2024.
- “Reviewing the Basics of Electrical Safety for Arc Flash and Electrical Shock,” Occupational Health & Safety webinar, June 15, 2023.
- “Thermal Protection for Electrical Work,” Incident-Prevention.com, Zarheer Jooma, Brian Shiels, and Stacy Klausing, M.S., September 29, 2022.
- “A Detailed Approach for ARC Flash Sustainability for Systems at or Below 240V and Over 2000A,” Kyle D. Carr, Zarheer Jooma, and John J. Whipple, 2022 IEEE IAS Electrical Safety Workshop, ESW 2022.
- “Equivalent Formulas for Determining Incident Heat Energy for Various Fault Currents and Clearing Times used in NESC and OSHA Regulations,” Marcia L Eblen, Tom Short, and Zarheer Jooma, IEEE IAS Electrical Workshop Virtual Conference, March 10, 2021.
- “How Expert Advice in a Tracking-Arc Incident Investigation Saved Money: Preventing Unnecessary Spending on New Personal Protective Equipment,” Zarheer Jooma, Hugh Hoagland, and Robert W. Hines, IEEE Industry Applications, vol. 25, issue 3, 2019.
- “Case History: Arc Flash Incident on a Locked Out (LO/TO) 3.3-kV-Fused Contactor,” Zarheer Jooma, Jessica Hutchings, Hugh Hoagland, and Ian R. Jandrell, IEEE Transactions on Industry Applications, vol.53, issue 2, 2017.
- “A method to measure the application of the incident investigation process for electrical incidents,” Zarheer Jooma, Jessica Hutchings, Hugh Hoagland, and Ian R Jandrell, IEEE IAS Electrical Safety Workshop (ESW), 2017.
- “The Analysis of an Incident Investigation System,” Zarheer Jooma, Jessica Hutchings, Elihu Hoagland and Ian R. Jandrell, IEEE Transactions on Industry Applications, vol.52, issue 6, 2016.
- “The Development of Questions to Determine the Effectiveness of the Incident Investigation Process for Electrical Incidents,” Zarheer Jooma, Jessica Hutchings, and Hugh Hoagland, IEEE Transactions on Industry Applications, vol. 51, issue 5, 2015.