

# ONSITE

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## ENGINEERING

### **LUCAS R. CHOUDEK**

Electrical Engineer

**Education:** BS in Electrical Engineering – 2013  
Computer Science - Minor  
Energy Engineering - Minor  
Applied Mathematics - Minor  
University of Minnesota, Duluth, MN

**Continuing Education:** Minnesota Chapter of IAAI “Fire & Arson Investigation” Conference, 3/18

City of Aurora, CO Public Safety Training Center, “Advanced Principles of Fire Dynamics”, 2/18, 24 Hours

Hazwoper Refresher Training 29 CFR.1910.120 Class, 11/17, 8 Hours

1<sup>st</sup> Aid, CPR, BBP and AED training, 11/17

Asbestos Awareness Training, 11/17

Confined Space Entry & Rescue Training, 11/17

NSPE-MN “OSHA & NFPA70E Based Electrical Safety in the Workplace”, 2 hours, 11/17

Whitemore Fire Consultants “Handling 1<sup>st</sup> & 3<sup>rd</sup> Party Subrogation & Liability Claims” Seminar, 9/17

Minnesota Chapter of IAAI “Fire Investigation” Conference, 3/17

“Alternative Fuel Vehicles Safety Training” NFPA/IAAI training program, 8 hours, 3/17

IAAI webinar “One Dimensional vs Two Dimensional Fire Investigation Experts”, 2/17

Hazwoper Certification, 40 hours, 10/16

NAFI's International Symposium on Fire Investigation Science & Technology Conference, 9/16

Whitemore Fire Consultants "In the Beginning...Building a Subrogation Case" Seminar, 7/16

Wisconsin Chapter of IAAI's Annual Fire and Arson Investigative Conference "Annual Spring Seminar", 20 hours, 6/16

Minnesota Chapter of IAAI "Fire & Arson Investigation" Conference, 20 hours, 3/16

Emergency Medical Responder Training, 2/16

Nebraska Chapter of IAAI's, Annual Fire and Arson Investigative Conference "Return to the Basics", 20 hours, 10/15

Wisconsin Chapter of IAAI's Annual Fire and Arson Investigative Conference "Annual Fall Seminar", 20 hours, 10/15

Iowa Chapter of IAAI's Annual Fire and Arson Investigative Conference, 19.25 hours, 9/15

"A Ventilation-Focused Approach to the Impact of Building Structures and Systems on Fire Development", IAAI's CFI Trainer course, 4 Hours

"Arc Mapping Basics", IAAI's CFI Trainer course, 4 Hours

"Digital Photography and the Fire Investigator", IAAI's CFI Trainer course, 4 Hours

"Documenting the Event", IAAI's CFI Trainer course, 4 Hours

"Effective Investigation and Testimony", IAAI's CFI Trainer course, 3 Hours

"Electrical Safety", IAAI's CFI Trainer course, 3 Hours

“Evidence Examination: What Happens at the Lab?”, IAAI’s CFI Trainer course, 4 Hours

“Fire Dynamics Calculations – Version 2.0”, IAAI’s CFI Trainer course, 4 Hours

“Fire Protection Systems”, IAAI’s CFI Trainer course, 3 Hours

“Introduction to Fire Dynamics and Modeling”, IAAI’s CFI Trainer course, 4 Hours

“Investigating Motor Vehicle Fires”, IAAI’s CFI Trainer course, 4 Hours

“Physical Evidence at the Fire Scene”, IAAI’s CFI Trainer course, 4 Hours

“Postflashover Fires”, IAAI’s CFI Trainer course, 4 Hours

“Process of Elimination”, IAAI’s CFI Trainer course, 3 Hours

“The Scientific Method for Fire and Explosion Investigation”, IAAI’s CFI Trainer course, 3 Hours

“Using Resources to Validate your Hypothesis”, IAAI’s CFI Trainer course, 2 Hours

Whitemore Fire Consultants “Back to the Basics” Seminar, 5/15

Minnesota Chapter of International Association of Arson Investigators -Fire and Arson Investigation Conference, 4/15

MN Electrical Association Grounding & Bonding, Overcurrent & Motors, 16 Hours, 4/15

Institute of Electronics and Electrical Engineers - Power and Energy Society Transmission & Distribution Conference & Exhibition, Chicago, IL, 4/14

North Central Engineers Conference, Hinckley, MN, 2014

49<sup>th</sup> Annual Minnesota Power Systems Conference,  
Brooklyn Center, MN, 11/13

**Experience:**

- 6/14 to Present** **OnSite Engineering & Forensic Services, Inc.,**  
**Prior Lake, MN**  
*Forensic Electrical Engineer*  
Perform forensic electric failure analysis of electrical service installations including underground feeders, overhead service failures, electrical distribution equipment, transformer failures, fuse failures. Identify installation deficiencies of electrical installations in commercial, industrial and residential structures.
- 7/15 to 3/18** **Prior Lake Volunteer Fire Department,**  
**Prior Lake, MN**  
*Fire Fighter*  
Provided emergency disaster management and planning, fire suppression, rescue, prevention, code enforcement and public education.
- 5/13 to 6/14** **Dakota Electric Cooperative, Farmington, MN**  
*Electrical Engineer/Distribution Engineer*  
Worked to improve the safety, reliability and overall economics of the electrical distribution system. Developed engineering studies, material specifications and applied construction and technical standards. Developed, designed, implemented and analyzed changes to the distribution system. Investigated new technologies.
- 1/05 to 5/13** **OnSite Engineering & Forensic Services, Inc.,**  
**Prior Lake, MN**  
*Engineering Intern and Inventory Manager*  
Support engineers with site investigation and laboratory examinations. Designed and conducted experiments, recover artifacts from loss site, research failure of products, prepare reports. Database Management and evidence collection, and company vehicle maintenance.

**Professional  
Affiliations:**

Member International Association of Arson Investigators  
Member International Association of Arson Investigators  
– Minnesota, Iowa, Nebraska and Wisconsin chapters  
Member National Fire Protection Association  
Member Institute of Electrical and Electronic Engineers  
Member National Association of Fire Investigators -  
International

**Papers and  
Presentations:**

Nebraska Chapter IAAI - Presentation- “Electrical  
aspects of Fire Investigation”- co presenter, 10/15

Science Night- Prior Lake High School- “Electricity and  
Fire”- co presenter, 3/14