

Matthew Gaffney

IAAI-CFI (V), NAFI-CFEI, NAFI-CVFI
Staff Consultant



Mr. Matthew Gaffney is a Staff Consultant with Engineering Systems Inc. (ESi), bringing more than eleven years of specialized experience in fire analysis, emergency response, and forensic investigation. He has conducted more than 185 fire investigations involving residential, commercial, vehicular, and complex incident environments. His areas of expertise include origin-and-cause determination, scene reconstruction, evidence preservation, and the development of detailed technical reports

Mr. Gaffney's professional background includes extensive public safety agency service as a Fire Apparatus Operator, Advanced Emergency Medical Technician, and primary fire investigator. In these roles, he supported major incident responses, provided operational leadership, and contributed to policy development. Prior to joining ESi, he performed comprehensive private-sector fire investigations on behalf of multiple city and county agencies.

His technical foundation is strengthened by ASE Master Automotive Technician credentials, advanced automotive systems training, and U.S. Army Explosive Ordnance Disposal instruction focused on hazardous ordnance identification and mitigation. He is supported by a broad educational background and specialized certifications in fire investigation, fire operations, hazardous materials, emergency medical services, and vehicle fire analysis. Mr. Gaffney is an active member of national and state fire investigation organizations and maintains a strong commitment to professional development, technical rigor, and adherence to the scientific method in fire and explosion investigations.

Education

AS, Fire and Emergency Services. Lanier Technical College.
2024

Licenses & Certifications

- IAAI-CFI(V)
- NAFI-CFEI
- NAFI-CVFI

Contact Information

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ESi Atlanta

430 Technology Parkway NW
Peachtree Corners, GA 30092

Areas of Specialization

- Failure Analysis & Root Cause Investigations
- Structural and Vehicle Fires
- Explosion Investigations
- Fire Chemistry
- Fire Protection Systems
- Automotive
- Electric & Hybrid Vehicle Fires
- Lithium-Ion Battery Fires
- Explosive Dynamics

Positions Held

Engineering Systems Inc., Peachtree Corners, GA

- Staff Consultant, 2026 – Present

Cunningham Investigative Associates

- Fire Analyst Technician, 2019- January 2026

West Jackson Fire Department

- Fire Apparatus Operator, Firefighter, AEMT and Fire Investigation Technician, 2022- January 2026

Lumpkin County Emergency Services

- Fire Apparatus Operator, Firefighter, AEMT and Fire Investigation Technician, 2019-2022

Barrow County Emergency Services

- Fire Apparatus Operator, Firefighter, AEMT and Fire Investigation Technician, 2015-2019

Continuing Education

- **IAAI Fire Investigative Training** - CFITrainer.net – 2019 to present
- **Explosive Ordinance Disposal** – US Army, 2008
- **Automotive Technology, Chassis Fabrication & High Performance Engines** – Wyoming Technical Institute, 2005

Professional Affiliations/Honors

- International Association of Arson Investigators (IAAI)
- IAAI Georgia Chapter GFIA
- National Association of Fire Investigators (NAFI)
- AEMT - Department of Public Health License # A002195