

## **CURRICULUM VITAE**

### **JOSHUA S. BASTIAN, PE, CFEI**

Joshua Bastian is registered engineer in training in California specializing in mechanical engineering and failure analysis of residential and consumer appliances. He works under the guidance of a professional Mechanical Engineer and professional Fire Protection Engineer.

#### **QUALIFICATIONS:**

- Provided failure analysis for over 100 commercial and residential property loss claims involving fire and water damage. Conducted on-scene and laboratory examination and analyses.
- Conducted engineering and testing for cases involving gas and electric stoves, furnaces, electrical outlets, outdoor and indoor lights, electric appliances, pellet stoves, pool pumps, microwaves, portable heaters, and HVAC systems.
- Performed material flame performance testing (UL 94 equivalent) on a residential space heater, a residential dishwasher, and other plastic samples.
- Collaborated on investigations with certified fire investigators, fire scientists and professional engineers.
- Over 100 solo origin and cause fire investigations.

#### **EDUCATION & CERTIFICATIONS:**

PE Certification California, License# M 40120 <i>Board for Professional Engineers, Land Surveyors and Geologists</i>	<b>July 2020</b>
PE Examination <i>Passed Professional Engineering Exam for Mechanical Engineers</i>	<b>April 2019</b>
Certified Fire & Explosion Investigator <i>National Association of Fire Investigators</i>	<b>March 2016</b>
Registered Engineer in Training <i>Board for Professional Engineers, Land Surveyors and Geologists CA Certificate No. EIT 157113</i>	<b>Dec. 2015</b>
Mechanical Engineering, Bachelor of Science <i>University of California, Berkeley</i>	<b>June 2003</b>
Film and Digital Media, Bachelor of Arts <i>University of California, Santa Cruz</i>	<b>July 2001</b>

## PROFESSIONAL DEVELOPMENT:

Arson Investigators Subrogation Webinar Series <i>The New Impact: NFPA 921, 2021 Ed. and NFPA 1033 2022 Ed.</i>	<b>Sept. 2020</b>
FCA Investigator Meeting: <u>Co-Presenter</u> <i>Evidence Collection, Documentation, and Dryer Fires; 2hrs. Tested</i>	<b>May 2019</b>
Cal-OSHA FIT (Terracon) <i>Respirator FIT Tested</i>	<b>Aug. 2018</b>
Cal-OSHA CCR (Terracon) <i>1hr. Lead Awareness; 2hrs. Asbestos Awareness</i>	<b>Aug. 2018</b>
Great Lakes Analytical: Webinar <i>Evidence Collection and Laboratory Testing</i>	<b>Nov. 2017</b>
Cozen O'Connor: Webinar <i>Fireplace and Chimney Subrogation: Common Claims and Recovery</i>	<b>Oct. 2017</b>
Cal-OSHA CCR (Argus Pacific) <i>1hr. Lead Awareness; 2hrs. Asbestos Awareness</i>	<b>Aug. 2017</b>
Fire Cause Analysis: Hal Lyson, CFI <i>NFPA 921 2017 Ed. Updates: 1 hr. Tested class</i>	<b>April 2017</b>
Cozen O'Connor: Webinar <i>Ventilation Fan Fires: Was the Ignition Inside or Outside the Fan?</i>	<b>March 2017</b>
Berkeley City Commons Club: <u>Co-Presenter</u> <i>Introduction to Fire Investigation</i>	<b>Feb 2017</b>
Fire K9.org: David Brien, EFI Global and John Dehaan <i>Arson Investigation Update: 4 hrs. Tested class</i>	<b>Oct. 2016</b>
IAAI North Dakota Chapter: <u>Co-Presenter</u> Tested Class <i>Fire Modeling: Tools for Fire Investigation and Testing the Hypotheses</i>	<b>July 2016</b>
Cozen O'Connor: Webinar <i>Lithium Battery Losses and Subrogation Issues</i>	<b>March 2016</b>
San Diego Fire-Rescue Dept – Metro Arson Strike Team <i>Ignition, Self-heating, and Spontaneous Combustion</i>	<b>March 2016</b>
Fire Cause Analysis <i>Promoted to Engineer Associate</i>	<b>March 2016</b>
Cal-OSHA CCR (RGA Environmental) <i>1hr. Lead Awareness; 2hrs. Asbestos Awareness</i>	<b>June 2015</b>
Sacramento-Sierra Regional Arson Task Force <i>Forensic Photography</i>	<b>April 2015</b>
Cozen O'Connor: Webinar <i>Expert Challenges and the Revised NFPA 1033</i>	<b>Dec 2014</b>
US Dept. Justice - Bureau of Alcohol, Tobacco, Firearms, and	<b>Sept 2014</b>

Explosives

*Advanced Electrical Fire Investigation*

Cal-OSHA CCR (RGA Environmental)

**June 2014**

*1hr. Lead Awareness; 2hrs. Asbestos Awareness; 1hrs. Hazard  
Comm from Fire Scene Toxins*

California Conference of Arson Investigators Bay Area Round Table  
Course

**April 2014**

*Crime Scene Investigation at Fire Scenes*

California Conference of Arson Investigators Bay Area Round Table  
Course

**March 2014**

*Anatomy of a Wrongful Arson Conviction*

California Conference of Arson Investigators Bay Area Round Table  
Course

**Oct. 2013**

*Getting the Most Out of Your Fire Scene*

Fire Cause Analysis Investigators Class

**July 2013**

*Wildland Fire Pattern Recognition Workshop*

Fire Cause Analysis

**July 2013**

*Hired as Research Associate*

**PROFESSIONAL:**

Member – ASME (American Society of Mechanical Engineers)

**March 2016 - Present**

Member – National Association of Fire Investigators

**Feb 2016 - Present**