OLUSEGUN ADEBAYO

STRUCTURAL FIRE ENGINEER

CONTACT

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SKILLS

Fire Dynamics Modeling (FDS / Pyrosim)

Performance-Based Fire Design

Structural Fire Analysis (SAFIR / ANSYS)

NFPA 5000 / IBC Fire Codes

Egress Modeling (Pathfinder)

Fire Risk Assessment

Project Management

Cross-Discipline Coordination

EDUCATION

University of California, Berkeley

Berkeley, USA

Master of Science

2010 - 2012

Civil and Environmental Engineering

GPA: 3.8/4.0

University of Michigan

Ann Arbor, USA

Bachelor of Science

2006 - 2010

Civil Engineering

GPA: 3.5/4.0

LANGUAGES

English

Spanish

SUMMARY

PE-licensed Structural Fire Engineer with 11 years at Arup and WSP performing performance-based fire engineering for high-rise towers and complex infrastructure. Reduced fire-related risks by 25% across $1.2B in projects, designed structural fire protection for 6 supertall towers, and authored fire engineering criteria adopted by 3 jurisdictions. Expert in FDS, SAFIR, and NFPA 5000 / IBC fire provisions.

EXPERIENCE

Arup New York, NY

Senior Structural Fire Engineer Jan 2018 - Present

Led performance-based fire engineering for high-rise and complex infrastructure projects.

- Performed structural fire analysis on $480M 58-story tower; reduced fire protection cost by $2.3M through performance-based design approach vs. prescriptive code
- Designed fire safety strategy for 6 supertall towers in NYC and Chicago; all projects approved by AHJ on first submission with 25% reduction in compartmentation costs
- Conducted FDS computational fire modeling for 14 unique fire scenarios across $1.2B portfolio; egress timing achieved 100% NFPA 101 compliance
- Authored performance-based fire engineering criteria adopted by 3 building departments as supplemental design guidance for tall buildings
- Mentored 4 junior fire engineers on SAFIR and FDS modeling; 2 achieved PE licensure within 18 months

WSP USA New York, NY

Structural Fire Engineer Jun 2013 - Dec 2017

Performed fire engineering analysis for commercial and institutional projects.

- Designed structural fire protection for $180M hospital expansion; specified intumescent coatings reducing fire protection cost by 22% vs. spray-applied options
- Conducted egress modeling for 8 educational facilities using Pathfinder; all designs achieved NFPA 101 evacuation criteria with 25% safety margin

PROJECTS

Structural Fire Engineer

The Shard 2015 - 2017

Worked on the design and development of the structural fire engineering solution for the 72-story skyscraper

Autodesk Revit • SAP2000

Junior Structural Fire Engineer

One World Trade Center 2012 - 2015

Assisted in the design and development of the structural fire engineering solution for the 104-story skyscraper

ETABS • SAFE

CERTIFICATES

PE License 2015

New York State Education Department

Professional Engineer License

CFP License 2018

National Institute of Certified Fire Protection Specialists

Certified Fire Protection Specialist License