



RESEARCH & FORENSIC CONSULTING

CURRICULUM VITAE
THEODORE RICHARD VAUGHAN

TECHNICAL AREAS OF SPECIALIZATION

- Accident Reconstruction
- Computer Modeling and Simulations
- Vehicle Testing and Dynamics
- Computer Aided Drafting

EDUCATION

2005	MS	UNIVERSITY OF CALIFORNIA LOS ANGELES Mechanical Engineering
2002	BS	UNIVERSITY OF CALIFORNIA AT BERKELEY Mechanical Engineering

REGISTRATION

Registered Professional Engineer, California Number M50481

CERTIFICATION

ACTAR Accreditation #1909 5-31-09
CDR System Analyst 12-12-08
CDR System Technician 2-21-07
EIT Certificate No. 118465
LSIT Certificate No. LST7335

ADDITIONAL TRAINING

SAE Tire and Wheel Safety Issues, November 2008
SAE The Tire as a Vehicle Component, November 2008
ARC-CSI Crash Conference, June 2008
SATAI Summer Conference, July 2007
MEA Forensic Engineers & Scientists, Ltd. PC Crash Training, June 2007
ARC-CSI Crash Conference, June 2007
ARC-CSI Crash Conference, June 2006
SAE Accident Reconstruction Symposium, November 2005
SATAI Fall Conference, November 2005
SATAI Summer Conference, July 2004
SAE Chassis and Suspension Component Design for Passenger Cars and Light Trucks, June 2004
CAARS vs. Bikes Conference, October 2003
ARC-CSI Crash Conference, June 2003

EXPERIENCE

2003 to Date VECTOR SCIENTIFIC, INC. – LOS ANGELES, CALIFORNIA
Engineer

- Accident reconstruction. Vehicle and collision scene investigation including scene surveying, photography, and video creation. PC-Crash analysis and modeling. Crush and skid analysis.

2002 WATER2SAVE, INC. – SOLANA BEACH, CALIFORNIA
Engineering Intern

- Installed and initialized Water2Save water regulation systems on site while working with RF engineers and installation teams.
- Debugged malfunctioning systems, ran diagnostic tests on existing systems using HyperTerminal and SMS messaging.
- Created a software platform in Java allowing for an automated diagnostic program via wireless transmission.

2001 ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY
Data Processing and Analyst

- Ran simulation tests on residential furnaces and boilers with DOE2 and Energy Plus software in order to calculate heat losses on virtual houses.
- Formatted data in Excel with Visual Basic in order to make descriptive spreadsheets and graphs.
- Altered furnace specifications in order to improve AFUE efficiency ratings.
- Prepared detailed reports covering both simulation test results and heat loss calculations for oral presentations and for display on the department website.
- Maintained department website through use of Lotus Quickplace.

TECHNICAL BACKGROUND

Accident Reconstruction:

Scene investigation, skid /crush analysis, photography/video re-enactment, vehicle inspection.
Computer-based accident reconstruction using PC Crash and Computer Aided Drafting.

PROFESSIONAL AFFILIATIONS

Society of Automotive Engineering (SAE)