



**Curriculum Vitae**  
**NATHAN S. SHIGEMURA**  
**TRAFFIC CRASH RECONSTRUCTIONIST**  
**TRAFFIC SAFETY GROUP, LLC**

**QUALIFICATIONS**

- Certified Accident Reconstructionist, State of Illinois.
- Accredited by the Accreditation Commission for Traffic Accident Reconstruction (ACTAR).
- Certified Instructor, Commission of Criminal Justice Standards and Training, State of Florida.

**Present Teaching Assignments**

- Institute of Police Technology and Management, University of North Florida, (internationally).
- Traffic Safety Group, LLC, (nationally).

**Past Teaching Assignments**

- Illinois State Police Academy.
- Illinois State Police In-Service Training Programs.
- Regional Police In-Service Training Programs.
- Cook County Sheriff's Police Academy.
- Belleville Police Academy.
- Northwestern University Traffic Institute.

**EDUCATION**

Lane Technical High School - Chicago, IL, 1970  
B.S.E.E., University of Illinois - Chicago, 1975  
Major: Electronic and Electrical Engineering

**ADDITIONAL  
TRAINING**

[See Addendum A.](#)

**AWARDS AND  
COMMENDATIONS**

**Lifetime Achievement Award**, Illinois Association of Technical Accident Investigators-  
September 2014

**Russell J. Arend Award**, Institute of Police Technology and Management-April, 2014, for outstanding achievement in highway safety and distinguished contribution in the training of traffic safety professionals.

**Outstanding Presenter Award**, Institute of Police Technology and Management - April, 2006, for the topic *Off-tracking of Vehicles in Low Speed Turns* presented at the annual Special Problems in Traffic Crash Reconstruction seminar.

**Outstanding Presenter Award**, Institute of Police Technology and Management - April, 2002, for the topic *An Introduction to Rotational Mechanics* presented at the annual Special Problems in Traffic Crash Reconstruction seminar.

**Outstanding Presenter Award**, Institute of Police Technology and Management - April, 2001, for the topic *Practical Evidence Interpretation, Keeping It Simple* presented at the annual Special Problems in Traffic Crash Reconstruction seminar.

**Unit Citation**, Illinois State Police - July , 2000, in recognition of the professionalism, selfless devotion to duty, and esprit de corp displayed as a member of the District 21 Response/Investigative/Support Team in handling the Amtrak train wreck, the worst in Illinois history, occurring in Bourbonnais, IL on March 15, 2000.

**Certificate of Recognition**, Illinois State Police - June, 1999, for the successful design, instruction, and completion of 80-Hour At-Scene Traffic Crash Investigation Program for Cadet Class 96.

**Outstanding Presenter Award**, Institute of Police Technology and Management - April, 1998, for the topic *Using Simultaneous Equations to Solve In-line Collisions* presented at the annual Special Problems in Traffic Accident Reconstruction seminar.

**Meritorious Service Award**, Illinois State Police - April, 1997, for excellence in job performance and exemplary work as District 18's traffic crash reconstruction officer.

**Certificate of Recognition**, Illinois State Police - December, 1996, for dedication and exemplary investigative endeavors instrumental in a successful reckless homicide, aggravated DUI, obstruction of justice prosecution originating from an alleged traffic crash incident.

**AFFILIATIONS**

Illinois Association of Technical Accident Investigators (IATAI) - Member - Past President (1992-1998)  
Society of Automotive Engineers (SAE) - Member

**PUBLICATIONS**

Shigemura, Nathan S. and Andrew Rich, *Balancing Collision Forces in Crush/Energy Analyses*, Institute of Police Technology and Management, Jacksonville, FL, 2007.

Daily, John, Nathan S. Shigemura and Jeremy S. Daily, *Fundamentals of Traffic Crash Reconstruction*, Institute of Police Technology and Management, Jacksonville, FL, 2006.

Daily, John and Nathan S. Shigemura, *Fundamentals of Applied Physics for Traffic Accident Investigators*, Institute of Police Technology and Management, Jacksonville, FL, 1997.

Shigemura, Nathan S., *Mathematics for the Traffic Accident Investigator and Reconstructionist*, Institute of Police Technology and Management, Jacksonville, FL, 1996.

**EXPERIENCE**

Present

**Traffic Safety Group, LLC, New Berlin, Illinois**

*Owner/Traffic Crash Reconstructionist* (February 2000- Present)

Owner/operator of a traffic crash reconstruction and analysis business (new name for Shigemura & Associates, see below). Provide traffic crash reconstruction services, expertise and training for the private sector. Clients include insurance companies, law firms and other interests representing plaintiffs, claimants and defendants. Provide expert testimony in various courts and depositions regarding areas of traffic crash reconstruction/investigation. Perform as a nationwide instructor and lecturer in the field of traffic crash reconstruction/investigation ([see Addendum B](#)).

2001-2002

**Illinois State Police, Operational Services Command, Financial and Cyber Crime Unit, Springfield**

*Investigator*

(February 2001 - November 2002)

Responsible for investigating high-tech and computer-related crime including crimes committed on the Internet such as fraud and child pornography. Liaised with federal, state and local criminal justice authorities in the investigation and prosecution of these crimes. When available, performed as nationwide instructor and lecturer in the field of traffic crash reconstruction/investigation. Retired from the department at the end of November, 2002.

1997-2001

**Illinois State Police, Support Services Group, Traffic Crash Reconstruction Team, Springfield***Statewide Supervisor*

(April 1997 - February 2001)

Responsible for the supervision and administration of the Traffic Crash Reconstruction Team. This unit was comprised of approximately 40 traffic crash reconstruction officers assigned statewide. Duties included providing supervision, technical guidance and expertise to those officers in the field of traffic crash investigation and reconstruction. Was also responsible for quality assurance for the officers' crash reconstruction reports. Performed as a traffic crash reconstruction officer for limited, specialized cases. Performed as a consultant and resource for department personnel, other police departments and legal entities. Performed as nationwide instructor and lecturer in the field of traffic crash reconstruction/investigation. Received promotion to Sergeant on October 16, 1997.

1991-2000

**Shigemura & Associates, Palmyra, Illinois***Owner/Traffic Crash Reconstructionist*

(January 1991 - February 2000)

Owned and operated traffic crash reconstruction and analysis business. Provided traffic crash reconstruction services and expertise for the private sector. Clients included insurance companies, law firms and other interests representing plaintiffs, claimants and defendants. Provided expert testimony in various courts and depositions regarding areas of traffic crash reconstruction/investigation.

Performed as a nationwide instructor and lecturer in the field of traffic crash reconstruction/investigation.

1996-1997

**Illinois State Police, Bureau of Crime Scene Services, Digital Imaging and Illustration Section, Springfield***Computer Graphic Designer, Traffic Crash Reconstruction Officer*

(September 1996 - April 1997)

Responsible for the generation of 2-D computer generated graphics for situations such as crime scenes and traffic crash reconstructions for use in court and reports. Also responsible for generating such graphics for other applications such as special department projects. Performed research and development tasks in the state of the art 2-D and 3-D computer graphics, video, etc. field. Performed as a traffic crash reconstruction officer for limited, specialized cases. Performed as a consultant and resource for department traffic crash reconstruction officers, department personnel, other outside police departments and legal entities. Performed as a nationwide instructor and lecturer in the field of traffic crash reconstruction/investigation.

1990-1996

**Illinois State Police, District 18, Litchfield***Traffic Crash Reconstruction Officer*

(March 1991 - September 1996)

In addition to the duties of a field trooper, performed the duties of the district traffic crash reconstruction officer. Duties included but were not limited to responding to the scene of fatal or potentially fatal traffic crashes to gather evidence for analysis and to continue the analysis to the applicable level needed, up to and including a full reconstruction; provided testimony as an expert witness in various courts in areas of traffic crash reconstruction/investigation; provided traffic crash reconstruction services and expertise to Illinois State Police personnel in other districts, county and local police agencies and state's attorney offices. State of Illinois certified in March, 1991, ACTAR accredited in January, 1994.

*Field Trooper*

(November 1990 - March 1991)

Performed the patrol duties of a trooper. Performed as an instructor in the areas of expertise listed above.

1988-1990

**Illinois State Police Academy, Springfield***Traffic Law Enforcement Specialist*

(March 1988 - November 1990)

Responsible for the implementation and execution of numerous Academy training programs. Performed as instructor and coordinator of those programs locally and nationally. Identified training needs and developed new programs to meet those needs. Reviewed and modified existing programs to improve their quality and state of the art. Participated in various workshops, committees, and task forces related to areas of expertise listed above. Researched, evaluated, and recommended on various traffic laws and regulations (both existing and proposed). Performed as resource/contact person for field personnel and the general public requiring assistance in areas of expertise listed above. Provided testimony as an expert witness in various courts in areas of expertise listed above. Assisted in administering the Radar/VASCAR program for the Department. Received promotion to Trooper First Class.

1983-1988

**Illinois State Police, District 2, Elgin***District Fleet Supervisor*

(August 1987 - March 1988)

Responsible for the administration and operation of the vehicle fleet and equipment of both District 2 and Zone 2. Improved the quality of the fleet through selected repairs while continuing to remain under budget. Position required relinquishing Trooper First Class rank.

*District Computer Specialist*

(November 1986 - March 1988)

Responsible for analyzing district data processing needs and submitting computer equipment purchase recommendations based on cost and feasibility. Responsible for writing custom computer programs to meet district needs. Performed as a "user rep" for personnel using the district computers, providing technical assistance as required. Member of the Office Automation Task Force (formed to analyze and submit a proposal on the statewide computerization of Illinois State Police districts). Assisted in the debugging and testing of custom computer programs written for the districts by Management Information Bureau.

*Field Trooper*

(June 1983 - November 1986)

Performed the patrol duties of a trooper. In addition, performed as a: Field Training Officer; Illinois Vehicle Code instructor for the Academy; district First Aid/CPR instructor; juvenile officer in DuPage County. Received promotion to Trooper First Class. Participated in the Chicago Expressway Detail.

1983

**Illinois State Police Academy, Springfield***Cadet*

(February 1983 - June 1983)

Received top marksman award.

1975-1983

**GTE Automatic Electric, Northlake, Illinois***Hardware/Software Design Engineer*

(June 1975 - February 1983)

Responsible for the design (from conception through construction to cut-over) of electronic test equipment and the software to run it. Digital hardware design included CMOS and TTL logic families. Programming included but was not limited to Pascal and PL1. Value of the various pieces of equipment ranged from \$200.00 to \$10,000.00 per unit and was used to test individual electronic components, printed circuit boards, and electronic telephone switching equipment used in GTE central offices.