# Stephen C. Showalter 5645 176<sup>th</sup> PI SE Bellevue, WA 98006 Stephen@ShowalterCAR.com 425.444.5648

# **CURRICULUM VITAE**

# **SUMMARY**

Stephen Showalter began Showalter Collision Analysis & Reconstruction LLC in 2015, bringing public service expertise to the private sector.

Stephen Showalter is a retired police officer from the City of Lynnwood, located in Snohomish County, Washington. He was an officer for over twenty years with seventeen years assigned to the traffic section. Stephen became the lead investigator or reviewer of all major collisions in the city and investigated over 3,000 collisions in the performance of his official duties, ranging from minor parking lot disagreements to vehicular homicide criminal cases. Investigation duties included detailed scene and vehicle examinations, gathering of physical evidence, photography, documentation with drone and total station, diagramming, witness and suspect interviews, day and nighttime visibility studies, time-distance analyses, crash data retrieval (CDR) analyses, seatbelts, lightbulbs, traffic signals, occupant kinematics analyses, expert witness testimony, and collision reconstruction. Stephen was also assigned a police motorcycle to enforce rules of the road violations.

Stephen Showalter has over 1,500 training hours specific to collision investigation and is an accredited collision reconstructionist, ACTAR #2374.

# **ACADEMIC BACKGROUND**

**SEATTLE UNIVERSITY** – Seattle, WA

Master of Public Administration - 2009

**University of Washington** - Seattle, WA

Bachelor of Arts in Economics – 1989

BELLEVUE COMMUNITY COLLEGE - Bellevue, WA

Associate of Arts in Administration of Criminal Justice – 1992

# NORTH SEATTLE COMMUNITY COLLEGE - Seattle, WA

Emergency Medical Technician (certificate) - 1993

# HIGHLINE COMMUNITY COLLEGE - Des Moines, WA

Reserve Police Officer Academy (certificate) - 1997

# Washington State Criminal Justice Training Center - Burien, WA

Basic Police Academy - 1999

# PROFESSIONAL EXPERIENCE

# **SHOWALTER COLLISION ANALYSIS & RECONSTRUCTION LLC**

Principal – 2015 to present

# **COLLISION ANALYSIS & RECONSTRUCTION LLC**

Associate - 2016 to present

# LYNNWOOD POLICE DEPARTMENT

Traffic Officer - 2003 to 2019

Patrol Officer - 1999 to 2003

Reserve Police Officer - 1998 to 1999

# **WOODWAY POLICE DEPARTMENT**

Patrol Officer – 2003 to 2005 (contract city)

## **MEMBERSHIP**

## WASHINGTON ASSOCIATION OF TECHNICAL ACCIDENT INVESTIGATORS

WATAI Member - 2009 to present

## **ACCREDITATION COMMISSION FOR TRAFFIC ACCIDENT RECONSTRUCTION**

ACTAR Accredited Traffic Accident Reconstructionist #2374 – 2011 to present

# **EDMONDS SCHOOL DISTRICT TRANSPORTATION SAFETY ADVISORY COMMITTEE**

Member - 2014

#### LYNNWOOD POLICE GUILD

Treasurer - 2015 to 2019

# NATIONAL ASSOCIATION OF FIELD TRAINING OFFICERS - WASHINGTON CHAPTER

Treasurer – 2016 to 2019

# NATIONAL ASSOCIATION OF PROFESSIONAL ACCIDENT RECONSTRUCTION SPECIALISTS

NAPARS Member – 2016 to present

# **FEDERAL AVIATION ADMINISTRATION**

sUAV Remote Pilot certificate #4208196 - 2018 to present

# **SAE INTERNATIONAL**

SAE Associate Member – 2022 to present

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# **COLLISION INVESTIGATION TRAINING**

# **BASIC TRAFFIC COLLISION INVESTIGATION**

Washington State Criminal Justice Training Commission (CJTC) – Lynnwood, WA 2001 – 40 hours

# **ADVANCED TRAFFIC COLLISION INVESTIGATION**

CJTC - Lynnwood, WA - 2002 - 80 hours

# **TECHNICAL TRAFFIC COLLISION INVESTIGATION**

CJTC - Kent, WA - 2004 - 120 hours

# **MOTORCYCLE ACCIDENT INVESTIGATION**

University of North Florida, Institute of Police Technology and Management (IPTM) – Bellevue, WA – 2005 – 40 hours

# **ACCELERATION AND VERICOM FAMILIARIZATION PRESENTATION**

Vericom Computers - Fort Lewis, WA - 2006 - 16 hours

# **TOTAL STATION CRIME SCENE MAPPING**

CJTC - Everett, WA - 2006 - 40 hours

# CRASH ZONE - CRASH/CRIME SCENE COMPUTER AIDED DIAGRAMMING

IPTM - Portland, OR - 2007 - 40 hours

# **COLLISION INVESTIGATION RECONSTRUCTION**

Washington State Patrol Academy - Shelton, WA - 2007 - 141 hours

## CRASH ZONE - ADVANCED

Ron Sanders, CARS - Renton, WA - 2009 - 16 hours

# WATAI 2009 FALL CONFERENCE - Burien, WA

#### STAGED COLLISIONS PRESENTATION

Rusty Haight, Collision Safety Institute – 10 hours

# **VECTOR DIAGRAMMING USING MOMENTUM**

Greg Russell, Accident Analysis & Reconstruction – 6 hours

## **CRUSH ENERGY ANALYSIS**

Greg Russell, Accident Analysis & Reconstruction – Everett, WA – 2010 – 40 hours

## **COLLISION RECONSTRUCTION UPDATE**

Greg Russell, Accident Analysis & Reconstruction – Redmond, WA – 2010 – 40 hours

# WATAI 2010 FALL CONFERENCE - Renton, WA

## **CRASH RECONSTRUCTION AT TRAFFIC SIGNAL INTERSECTIONS**

Daren E. Marceau, P.E., Forensic Traffic Specialists – 24 hours

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# WATAI 2011 Spring Conference - Redmond, WA

# **UNIQUE ASPECTS OF CAR/POLE COLLISIONS**

Joseph N. Cofone – 4 hours

# **AUTOMOTIVE GLASS CODING / LOW SPEED IMPACTS / HID LAMP INSPECTIONS**

Dr. Kenneth Zion - 3 hours

# WATAI 2012 Spring Conference - Burien, WA

## HYBRID AND NEW VEHICLE TECHNOLOGY FOR FIRST RESPONDERS

Matt Stroud, MGS Tech Innovation Technologies - 8 hours

# PEDESTRIAN RECONSTRUCTION INVESTIGATION

Greg Russell, Accident Analysis & Reconstruction – Bellevue, WA – 2013 – 40 hours

# WATAI 2013 Spring Conference – Seattle, WA

# HEAVY TRUCK COLLISION RECONSTRUCTION REFRESHER AND ECM DATA UPDATE

Ron Heusser, EA<sup>2</sup>, and Greg Wilcoxson, WSP – 8 hours

# WATAI 2013 FALL CONFERENCE - Bellevue, WA

# **ADVANCED RECONSTRUCTION CONCEPTS**

Greg Russell, Accident Analysis & Reconstruction – 24 hours

#### **PHOTOGRAMMETRY PRESENTATION**

iWitness - Snohomish County Sheriff's Office - Everett, WA - 2013 - 4 hours

# FORENSIC 3D LASER SCANNING SEMINAR

The PPI Group – Seattle, WA – 2013 – 6 hours

# WATAI 2014 Spring Conference – Bellevue, WA

**Low Speed Impact Analysis and Testing** – Robert Stearns – 8 hours **Injury Causation in Low Speed Impacts** – Dr. Rick Robertson – 8 hours

# WATAI 2014 FALL CONFERENCE – Seattle, WA

STAGED COLLISIONS PRESENTATION – Crash Data Specialists – 12 hours

DATA RETRIEVAL (CDR) SYSTEM OPERATORS/ANALYSIS AND APPLICATIONS

UPDATE

Crash Data Specialists - 16 hours

THE INFLUENTIAL WITNESS - Robert Sterns - 4 hours

## WATAI 2015 Spring Conference - Burien, WA

# **CRASH RECONSTRUCTION AT TRAFFIC SIGNAL INTERSECTIONS**

Daren E. Marceau, P.E., Forensic Traffic Specialists – 16 hours

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# WREX 2016: World Reconstruction Exposition - Orlando, FL

# **DRIVER RESPONSE DEPENDS UPON INFORMATION CONTENT**

Dr. Jeffrey Muttart, Crash Safety Research – 1.5 hours

# **INVESTIGATION OF EMERGENCY VEHICLE CRASHES**

Chris Daly, Drive to Survive.org – 1.75 hours

# ESTIMATING PASSENGER CAR PERFORMANCE – USING LIMITED VEHICLE DATA TO ESTIMATE TIME/DISTANCE/SPEED RELATIONSHIPS FOR ACCELERATING CARS AND MOTORCYCLES

Wade Bartlett, PE, Mechanical Forensics Engineering Services – 1.75 hours

# **VIDEO ANALYSIS OF TRAFFIC COLLISIONS**

Adam Cybanski, Gyro Flight and Safety Analysis – 1.75 hours

# **SPEEDOMETER AND COLLISION RECONSTRUCTION**

Christopher Goddard, Collision Science – 1.75 hours

# VEHICLE ROLLOVER CRASH TESTING APPLIED TO ACCIDENT RECONSTRUCTION

Don Stevens, Safety Engineering and Forensic Analysis – 1.75 hours

# DIGITAL FORENSICS & HEAVY VEHICLE POST CRASH INSPECTIONS FOR COLLISION RECONSTRUCTIONIST

Scott Skinner, Collision Consulting – 1.75 hours

## **HEAVY VEHICLE RECONSTRUCTION**

Dave Stopper, Stopper & Associates – 1.75 hours

#### **PEDESTRIAN COLLISIONS**

Mike Reade, Forensic Reconstruction Specialists – 1.75 hours

## **MOTORCYCLE COLLISION RECONSTRUCTION**

Louis Peck, MSME; Dial Engineering, Lightpoint – 1.75 hours

# **VISUAL AMODAL PERCEPTION**

Dr. Rick Wakefield, International Healthcare Consulting – 1.75 hours

# TAR WITH MS EXCEL

Greg Russell, Accident Analysis & Reconstruction - 1.75 hours

# **CRASH DATA RETRIEVAL UPDATE**

Rick Ruth, Ruth Consulting – 1.75 hours

# CRASH TESTING OF TRACTOR/TRAILERS, CARS, SUV'S, AND MOTORCYCLES

et al. - 8 hours

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# WATAI 2016 Spring Conference – Burien, WA

**ACCELERATION CALCULATIONS WITH LIMITED DATA** 

FRICTION AND BRAKING

**CRITICAL SPEED YAW** 

SIDESWIPES AND SPEED RATION

**CMV BRAKING** 

**SENSITIVITY & MONTE CARLO** 

MODERN EDR CASE STUDY

Wade Bartlett, Mechanical Forensics Engineering Services – 16 hours

# CRASH DATA RETRIEVAL TECHNICIAN LEVEL 1 & 2

Ron Sanders, Collision Safety Institute – Seattle, WA – 2016 – 16 hours

# WATAI 2016 FALL CONFERENCE – Burien, WA

# WHAT TO LOOK FOR IN A SIMULATION (PC CRASH SOFTWARE INTRODUCTION)

John Hunter - 8 hours

WREX 2016 REVIEW - WATAI Board - 8 hours

# **2017 HVE FORUM** – New Orleans, LA

Simulation Fundamentals

# 3D Editor Functionality, Friction Zones & Importing Models

**Simulation Movies** 

# **Building a Vehicle for HVE & HVE-2D**

Engineering Dynamics Corporation – 34 hours

# WATAI 2017 Spring Conference – Burien, WA

**Expert Witness** – Amy Friedheim – King County Prosecutor and King

County Superior Court Judge Williams – 6 hours

**Collision Studies** – WATAI member – 6 hours

# EVENT DATA RECORDER USE IN TRAFFIC CRASH RECONSTRUCTION - LEVEL 1

IPTM – Rick Ruth, Ruth Consulting – Burien, WA – 2017 – 40 hours

# **2018 HVE FORUM** - Charleston, SC

**Advanced HVE-2D** 

# **Theoretical and Applied Vehicle Dynamics**

Engineering Dynamics Corporation – 34 hours

# WATAI 2018 Spring Conference – Burien, WA

**Forensic Video Analysis** – Andrew Fredericks, Forensic Video Solutions – 6 hours

# **CRUSH ENERGY ANALYSIS**

Greg Russell, Accident Analysis & Reconstruction – Burien, WA – 2018 – 40 hours

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# WATAI 2018 FALL CONFERENCE - Seattle, WA

Crash Tests and Analysis Review & Crash Data Review – Brad Muir, Crash Data Specialists, and Greg Russell, Accident Analysis & Reconstruction – 24 hours

#### **DARTDRONES**

Part 107 Drone License Test Prep with pilot and mapping training – Lynnwood, WA 2018 – 32 hours

# PIX4D

Pix4D (photogrammetry software) – Lynnwood, WA – 2018 – 16 hours

# **2019 HVE FORUM** – Las Vegas, NV

Engineering Dynamics Corporation - Advanced HVE-2D - 34 hours

# WATAI 2019 Spring Conference – Burien, WA

# **Non-Traditional Approaches Linear Momentum Collisions**

Det. Aaron Parker, Seattle PD - 6 hours

# **USING PIX4D IN COLLISION INVESTIGATION**

Greg Russell, Accident Analysis & Reconstruction – Renton, WA – 2019 – 40 hours

# HEAVY VEHICLE EVENT DATA RECORDER USE IN TRAFFIC CRASH INVESTIGATION ANALYST TRAINING

Jim Loftis and Scott Skinner, Forensic Training Group – Meridian, ID – 2020 – 32 hours

# **2020 JOINT CONFERENCE** – NAPARS – Virtual Conference

**Motorcycles - Turning and Swerving** – Wade Bartlett – 2 hours

**Rollovers** – John Daily – 2 hours

GoPro GPS Analysis - Greg Russell - 2 hours

Perception Response Times for Various Crash Types – Dr. Jeff Muttart – 2 hours

**Chip-level Data Recovery** – Matthew DiSogra, Delta V – 2 hours

**Tires** – T.J. Tennent – 2 hours

Using New Freightliner Cascadia Data in Accident Reconstruction – Wes Grimes, Dave Plant, and Greg Wilcoxson – 2 hours

**TEXAS ASSOCIATION OF ACCIDENT RECONSTRUCTION SPECIALISTS** – Virtual Conference – 2020

# Nighttime Accidents – Applied Human Factors Concepts for A/R

Jeff Suway, JS Forensics Consulting – 15 hours

## 2021 HVE FORUM - Virtual Conference

Engineering Dynamics Corporation – Advanced HVE – 32 hours

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# **CLICK 3D PHOTOGRAMMETRY** (3DF Zephry)

Eugene Liscio, Ai2-3D Forensics - via Zoom - 2021 - 7 hours

# **CLOUDCOMPARE**

Eugene Liscio, Ai2-3D Forensics – via Zoom – 2021 – 7 hours

**WATAI 2021 FALL CONFERENCE** – Virtual Conference

Identification and Application of Human Factors and Visibility Issues in Traffic Collision Reconstruction – Bill Messerschmidt, Jeff Suway, Jim Sobek, John Lloyd, Swaroop Dinakar, and Lou Peck – 20 hours

# **HEAVY VEHICLE FORENSIC MECHANICAL INSPECTION FOR COLLISION INVESTIGATORS**

Northwestern University Center for Public Safety – Chattanooga, TN – Bill Foche and Michael Muller – 2021 – 40 hours

# **PIX4D USE IN COLLISION RECONSTRUCTION**

Forensic Mapping Solutions – via Zoom – Mark DiCocco – 2021 – 16 hours

# WATAI 2022 Spring Conference – Virtual Conference

# Advanced Reconstruction with EDR Applications Using Excel in Traffic Collision Reconstruction

Greg Russell, Accident Analysis & Reconstruction – 16 hours

# WATAI 2022 FALL CONFERENCE - Virtual Conference

# Crash Reconstruction at Traffic Signal Intersections Current Topics in Traffic Engineering for Crash Reconstruction

Daren E. Marceau, P.E., Forensic Traffic Specialists – 16 hours

**2022 JOINT CONFERENCE** – NAPARS – Virtual Conference

**Research & Information Sources** – Wade Bartlett – 2 hours

**Momentum Review** – Greg Russell – 2 hours

**Heavy Vehicle Bendix Pro Software Application** –Tommy Sturdivan – 2 hours

**Vehicle Dynamics** – Adam Hyde – 2 hours

# **Event Data Recorder Update**

Andrew Rich, Rich Consulting – NAPARS – via Zoom – 2023 – 2 hours

## RECON-3D

Eugene Liscio, Ai2-3D Forensics - via Zoom - 2023 - 4 hours

# **COMMERCIAL VEHICLE DATA SYSTEMS MASTER SERIES**

Forensic Training Group - Pleasant View, TN - 2023 - 24 hours

## **AERIAL PHOTOGRAMMETRY FOR CRASH RECONSTRUCTION**

Andrew Klane, Forensic Mapping Solutions – NAPARS – via Zoom – 2023 – 2 hours

#### **Human Factors**

Dr. Susan Lantz - NAPARS - via Zoom - 2023 - 2 hours

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# WREX 2023: World Reconstruction Exposition - Orlando, FL

# A HISTORICAL PERSPECTIVE ON TECHNOLOGY IN RECON

Wade Bartlett - 1.5 hours

# THE FUTURE OF RECON: DATA DRIVEN

Louis Peck - 1.5 hours

# **COMMERCIAL VEHICLE COLLISION MITIGATION SYSTEMS**

Tim Cheek, David Plant, Wesley Grimes – 2 hours

#### THE IMPORTANCE OF TIRES IN ACCIDENT INVESTIGATION

T. J. Tennant – 4 hours

# **EDR Accuracy of Modern Vehicles**

Rick Ruth - 2 hours

# ACCESSING TOYOTA EVENT/CAMERA DATA THROUGH TECH STREAM SOFTWARE

Brad Muir, Nick Manz - 2 hours

# **HEAVY TRUCK SIDE AND REAR UNDERRIDE SPEED ANALYSIS**

Scott Skinner - 2 hours

# THE USE OF MOBILE DEVICE LIDAR IN COLLISION RECONSTRUCTION

Eugene Liscio – 2 hours

# **HEAVY VEHICLE EDR UPDATE**

Brad Higgins – 2 hours

# PASSENGER VEHICLE / LIGHT DUTY TRUCK EDR UPDATE

Rick Ruth – 2 hours

# CRASH TESTING OF TRACTOR/TRAILERS, CARS, SUV'S, AND MOTORCYCLES

et al. - 7 hours

# **COLLISION RECONSTRUCTION MIDWAY DAY**

et al. – 6 hours

# **CRASH DATA - REVIEW OF CRASH DAY**

et al. - 2 hours

# **Accessing and Interpreting Heavy Vehicle Event Data Recorders**

SAE International – C1022 – Appleton, WI – 2023 – 30 hours

# **Advanced Applications of Heavy Vehicle EDR Data**

SAE International – C1901 – Appleton, WI – 2023 – 16 hours

# **OTHER RELEVANT TRAINING**

# **BAC (BLOOD ALCOHOL CONTENT)**

CJTC – Burien, WA – 1999 – 16 hours (plus multiple recertifications)

# **SPEED MEASURING DEVICE - RADAR**

CJTC - Lynnwood, WA - 2000 - 8 hours

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# **DWI DETECTION AND STANDARDIZED FIELD SOBRIETY TESTING**

CJTC - Lynnwood, WA - 2002 - 24 hours

# SPEED MEASURING DEVICE - LIDAR

CJTC - WSP, Bellevue, WA - 2003 - 4 hours

# **REID TECHNIQUE OF INTERVIEWING AND INTERROGATION**

John E. Reid & Associates – Seattle, WA – 2004 – 24 hours

# **BASIC POLICE PHOTOGRAPHY**

CJTC - Edmonds, WA - 2005 - 40 hours

## **PHOTO TRAFFIC SAFETY & ENFORCEMENT SOLUTIONS**

American Traffic Solutions – Lynnwood, WA – 2006 – 8 hours

# PURSUIT INTERVENTION TECHNIQUE (PIT)

CJTC – Lynnwood, WA – 2007– 4 hours (plus multiple recertifications)

# 2008 WASHINGTON TRAFFIC SAFETY COMMISSION CONFERENCE

Washington Traffic Safety Commission – Bellevue, WA – 16 hours

# Washington Traffic Safety Commission Seminar - Burien, WA

**LETHAL WEAPON – VEHICULAR HOMICIDE AND VEHICULAR ASSAULT** – 2011 – 16 hours

# ADVANCED ROADSIDE IMPAIRED DRIVING ENFORCEMENT (ARIDE)

Washington State Patrol, Impaired Driving Section, Drug Evaluation and Classification Program – Lynnwood, WA – 2018 – 16 hours

# **POLICE MOTORCYCLE**

Motorcycle Safety Foundation - Tacoma, WA - 2002 - 15 hours

Basic Police Motor Operator Course – Bellevue PD – Bellevue, WA – 2003 – 80 hours

Quarterly qualifications – Lynnwood PD – 2003 to 2019 – 5 to 10+ hours per quarter

Advanced Police Motorcycle Training – WSP, Shelton, WA – 2003 to 2019 – 24 to 32 hours annually

North American Motor Officers Association – 2008, 2010, 2012, 2016 – 32 hours each

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