

Joseph Cohen

5173 Waring Road, Suite 157
San Diego, CA 92120-2705
Voice: (619) 464-4427

Email: joe@erroranalysis.com



Human Factors practitioner with deep understanding of accident investigations, ergonomics in design, and circumstances that shape human performance and behavior. A credentialed professional with a broad domestic and international experience base who is skilled in project and field work, specializing in forensic and management consultations involving premises, products, and traffic safety.

EDUCATION

Bachelor of Arts (BA), Psychology (1997)
University of California, Riverside

Master of Arts (MA), Psychology, Human Factors and Applied-Experimental option (2000)
California State University, Northridge

Master of Science (MS), Industrial-Organizational Psychology (2005)
Alliant International University, San Diego

Doctor of Philosophy (PhD), Industrial-Organizational Psychology, industrial emphasis track (2009)
Alliant International University, San Diego
Outstanding PhD in Industrial-Organizational Psychology award recipient

CERTIFICATIONS

Board of Certification in Professional Ergonomics
CHFP, Certified Human Factors Professional #1037 (formerly CPE and AEP) (2002-Present)

International Board for Certification Services and Management
CHCM, Certified Hazard Control Manager #2834 (2000-Present)

Excel Tribometers, LLC – Slipmeter science, technology, manufacture, service
CXLT, Certified XL Tribometrist #100661 (2010-Present)

MEMBERSHIPS

Human Factors and Ergonomics Society #16367 (since 1998)
Safety Technical Group; Forensics Professional Technical Group

American Society of Safety Professionals #010019528 (since 2012)

ASTM International #1471112 (since 2011)
F13: Pedestrian/Walkway Safety and Footwear
13.50 subcommittee (Walkway surfaces); 13.10 subcommittee (Traction)
F15: Consumer Products
15.03 subcommittee (Safety Standards for Bathtub and Shower Structures)

International Code Council #8390446 (since 2015)

CURRENT POSITION

Principal

Error Analysis, Inc.
San Diego, CA (since 2017)

Conducts field investigations, reviews case files, performs research, analyzes evidence, and delivers findings. Advises attorneys, risk managers, insurance professionals, municipalities, governmental agencies, and businesses and various industries. Consults and testifies in legal proceedings, predominantly in civil litigation. Oversees the firm's contracts and engagements, including proposal writing, budgeting, and client relations. Directs the staff and contractors.

Consulted by parties representing plaintiffs and defendants in fourteen states in America. Assignments in litigation typically involve falls, crashes, collisions, exposures, and other activities that lead to injury. Has testified about topics such as standards and violations, dangerous conditions and unsafe acts, impairments, hazard response and avoidance, fundamentals of biomechanics, and warnings and instructions in premises liability, general negligence, motor vehicle, and products liability suits. Served as a forensic expert in legal cases in the United Kingdom, Ireland, and Singapore. Has testified as an expert in the Superior Court of California (El Dorado, Los Angeles, Monterey, Orange, Sacramento, San Bernardino, San Diego, Alameda), Superior Court of Arizona (Maricopa County), District Court of Nevada (Clark County), and United States District Court (District of Nevada).

Presently an Environment, Health & Safety Auditor & Human Factors advisor who leads annual California facility safety audits at the Zamboni Company USA, Inc., Paramount, CA. Since 2011, advised management during an update of safety labels, decals, instructions, and signs for ice re-surfacing machines and ice rink edgers sold in the global marketplace. Prepared work product as part of a successful bid that placed ice re-surfacers at the 2018 Olympic Games in Pyeongchang, South Korea. Supported Canadian distributor in response to inquiry by the Occupational Safety Commission, Quebec, Canada.

Attended Interactive Driver Response Research (IDRR) forum, Driver Research Institute, Atlanta, GA (Feb 2023).

PAST POSITIONS

Senior Consultant

Error Analysis, Inc.
San Diego, CA (2007-2017)

Was primary support of the firm's personnel engaged in forensic consulting and expert witness contracts in suits involving falls, crashes, collisions, and workplace accidents. Participated in reenactments and reconstructions. Researched case issues in the human factors and safety literatures. Also created policies, programs, plans, and procedures, records and documentation, workplace assessments and recommendations for ergonomic and other safety hazards and risk factors for the firm's clients.

Selected consulting projects:

Facility Design – Co-led update of the Workplace Design chapters of the original 2003 Federal Aviation Administration's (FAA) Human Factors Design Standard under sub-contract, which consists of design criteria intended for new, modified, or updated systems that are managed by the FAA. Equipment and workstation layout, design of passageways, walkway and floor surfaces, accessible routes, landings, platforms, entrances and exits, doors and hinges, hatches, ramps, ladders, stairs, and ramps were included topics. *Intuitive Design Solutions, Arlington, VA (2014-2015).*

Assessment of Walking and Working Surfaces – Performed slip tests on the floors in several areas of an Audi car dealership prior to its grand opening. *Dempsey Construction, Carlsbad, CA (2016).*

Litigation Consultant and Expert Witness (Safety & Human Factors), Bike Crash – Studied organization and testified as a 30C (6) corporate witness about the company history and structure, the intended use of the helmet

at issue, its design, including testing standards for safety, manuals, warnings, and all prior incidents involving the helmet line reported to the company. *Valencia Sport Group, Inc., San Diego, CA (2015).*

Risk Analysis, Medical Device for Treatment of Parkinson's Disease – Oversaw a literature review on head bumping incidents for the purpose of input to a risk analysis by a start-up medical device manufacturer. Data was obtained for various scenarios in which contact was likely to occur between a patient's head and objects in the built environment. *Sapiens, Netherlands (2014).*

Warnings & Safety Instructions, Motorcycle Clutch System – Reviewed existing warning and instructions for an auto-clutch system for motorcycles sold in the U.S. Led update of materials in which design input for safety information sheets, labels, and accessories for users to reduce the risk of runaway crash incidents was provided. *Rekluse, Boise, ID (2014).*

Workstation Assessment, Television Network Operations Center – Conducted a workstation assessment involving six computer displays. Provided insight about the factors contributing to an operator's discomfort. Recommendations were developed based on the field work that involved observations and interviews. *Fox Television, Las Vegas, NV (2014).*

Ergonomics Training and Workstation Assessment – Conducted a workstation assessment to address factors contributing to an operator's discomfort. Evaluated seating options. Provided recommendations based on field work that involved interviews and observations. *United States of America, Environmental Protection Agency, Las Vegas, NV (2013).*

Workstation Assessment, Retail Stores – Conducted a workstation assessment involving worker interactions with computer systems at the point of sale. Evaluated suitable seating options. Provided recommendations based on field work that involved observations and interviews. *Game Stop Corporation, Fort Worth, TX (2012).*

Ergonomics Training and Workstation Assessment – Trained employees to raise awareness of ergonomics issues. Conducted workstation assessments to address factors contributing to an operator's discomfort. Evaluated seating options. Provided recommendations based on field work that involved interviews and observations. *United Brotherhood of Carpenters, Las Vegas, NV (2012).*

EH&S Audit, Regional Distribution Center – Led audit in warehouse. Topics included injury surveillance and recordkeeping, training, job hazard analysis, medical surveillance, and culture. Issues were identified during walkthroughs of the facility. Recommendations were made to address hazards and ergonomic risk factors. *Electrolux Home Products, North America, Ontario, CA (2009).*

Job Safety Analysis, Power Plant – Co-led study of an unloading procedure involving a locomotive, rail cars, and a rotary car dumper. Analysis was performed to understand the effects of re-locating the locomotive operator from the controls in the cab to the ground near the rail car knuckles with a hand-held controller. *Mirant Mid-Atlantic, Dickerson, MD (2008-2010).*

Human Factors Study, Energy Construction – Co-led study of a line organization within an electric utility (Bronx-Westchester). A rigorous review was performed of the nature and causes of safety-related incidents that occurred over a three-year period. Determined the human factors relationship to the incidents and identified errors that were involved. Recommendations were developed to reverse the trend or prevent future occurrences. *Consolidated Edison of New York (2007-2008).*

Associate

Error Analysis, Inc.
San Diego, CA (1997-2007)

While supporting senior personnel at Error Analysis, co-led several field projects while also pursuing education in applied-experimental psychology (human factors option). Reviewed a voluntary compliance program plan for office employees at The Boeing Company in Anaheim, CA to identify and address ergonomics risk factors (2005). Conducted

an ergonomics evaluation involving The Coffee Bean & Tea Leaf's employees, equipment, tools, millwork, and store layout (see Publications and Presentations, pp. 5-7, Cohen & Imada, 2005).

Organizational Development Specialist

City of San Diego, Metro Wastewater Department
San Diego, CA (2005-2006)

Under the direction of the assistant deputy director, developed and implemented organizational development efforts including department strategic planning and optimization. Also supported citywide functional review of HR processes, including selection of police officers. Researched best management practices among various comparable government agencies. Evaluated the effectiveness of a health and injury management program designed to bring employees back to work safely and in a timely manner.

Research Associate

Pacific Science & Engineering Group, Inc.
San Diego, CA (2005)

Collected data and performed analyses during a research study funded by the Office of Naval Research in the U.S. Department of Defense involving human attention, vigilance, and augmented cognition tools to combat negative effects of awareness failures such as change blindness in the domain of naval air warfare (see Smallman & St. John, 2003). Other projects included research in support of a small business innovation research (SBIR) proposal, heuristic (usability) evaluation of chat tools used by naval operators to monitor several concurrent text streams, and development of a web-based decision-making tool based on cultural models for use by leadership of multicultural coalition forces working together in the field.

Intern

A.S. Imada & Associates
Carmichael, CA (2001)

Created evaluation and testing protocol of ergonomic safety enhancements for purposes of food service productivity for the Aramark Corporation at Dodger Stadium in Los Angeles, CA. Developed food service metrics and supervised a research team of five graduate students who worked in the field to gather data in support of the effort. Analyzed data and delivered study findings for presentation with the firm's principal to management representatives from both organizations.

Self-Defense Instructor

Young Olympians
Tustin, CA (1994-1998)

Provided self-defense training to children ages 5-15 while managing classes and equipment sales at locations in the greater Los Angeles and Inland Empire areas of California. Was a referee in competitive tournaments for children and teens at all ranks.

VOLUNTEER SERVICE

Student Instructor, American Colleges of Karate, El Cajon, CA (1993)
Research Assistant, University of California, Riverside, Riverside, CA (1997)
Lecturer, Foothills Bar Association, El Cajon, CA (2000)
Lecturer, Human Factors/Human Performance course, Alliant International University (2004)
Lecturer in Human Factors course, California State University, Northridge (2006-2010)
Lecturer, Orange County Bar Association, Newport Beach, CA (2006)

Judge, Greater San Diego Science & Engineering Fair, San Diego, CA (2010-2012)
Associate Editor, Ergonomics in Design, Sage Publications (2014-2018)
Expert for a mock trial, Thomas Jefferson School of Law, San Diego (2015)
Chair, Alliance for Professional Practice of Human Factors/Ergonomics (2021-2023)
Conference Judge, U.S. Military Academy, West Point, NY (April 2021)
Board of Directors, Foundation for Professional Ergonomics (2021-Present)
Board of Directors, Temple Emanuel Synagogue, San Diego, CA (2023-Present)

Human Factors and Ergonomics Society

- Vice Chair, Host Committee, Annual Meeting (2013)
- Budget & Finance Committee (appointed to fill vacancy) (2014)
- Secretary/Treasurer, Forensics Professional Group (2016-2018)
- Forensics Session Chair, annual meeting (2016, 2017, 2019)
- Webmaster/Newsletter Editor, Forensics Professional Group (2011-2017)
- Director, San Diego chapter (2014-2018)

Board of Certification in Professional Ergonomics

- Board of Directors (2011-2017)
- Vice President (2013-2014)
- President (2014-2015)
- Certification Committee (2014-2021)
- Certification Committee Chair, BCPE (2016)

Peer-reviews performed:

- Human Factors journal, Sage Publications
- Theoretical Issue in Ergonomics Science journal, Taylor & Francis
- Conference submissions, Forensic Professional Group, HFES
- Conference submissions, Safety Technical Group, HFES
- Conference submissions, Chartered Institute of Ergonomics and Human Factors (UK)

PUBLICATIONS & PRESENTATIONS

1. Cohen, J. (2023). A forensic case study of a vehicle backing mishap. Poster, International Meeting of the Human Factors and Ergonomics Society, Washington, D.C.
2. Cohen, J., & Cohen, H. H. (2019). A truck driver's dilemma. In M.S. Wogalter (Ed.) *Forensic Human Factors and Ergonomics: Case Studies and Analyses* (pp. 271-281). Boca Raton, FL: CRC Press.
3. Cohen, J., LaRue, C., & Cohen, H. H. (2017). Attention interrupted: Cognitive distraction & workplace safety. *Professional Safety*, 62(11), 28-34.
4. Cohen, H. H., & Cohen, J. (2016). Fall forensics: Principles and applications. In Hsiao (Ed.) *Fall Prevention and Protection: Principles, Guidelines, and Practices*. CRC Press: Boca Raton, FL.
5. Cohen, J. (2011). The role of forensic organizational ergonomics. *Ergonomics in Design*, 19(1), 29-32.
6. Cohen, J., LaRue, C. A., & Cohen, H. H. (2010). Stairway falls: An ergonomics analysis of 80 cases. *Professional Safety*, 54(1), 27-32.
7. Cohen, J. (2009). The effects of performance monitoring and surveillance procedures on procedural justice, privacy invasion, and counterproductive behavioral intentions. Ph.D. dissertation.
8. Cohen, H. H., Cohen, J., Wogalter, M. S., & Mendat, C. (2006). Warning channel: Modality and media. In *Handbook of Warnings* (M. Wogalter, Ed.). Mahwah, NJ: Erlbaum, 123-134.

9. Cohen, H. H., & Cohen, J. (2004). Employee participation in a hospital hazard management system. *Ergonomics in Design*, 12(3), 31-18.
10. Cohen, J. (2000). The effect of human factors expert testimony and staircase design on allocation of responsibility in a premises liability case. Master's thesis, California State University, Northridge.
11. Cohen, J., & Cohen, H. H. (2001). Human factors in stairway fall litigation. *Ergonomics in Design*, 9(3), 19-24.
12. Nemire, K., Cohen, H. H., & Cohen, J. (Eds.) (2014). *The Human Factors and Ergonomics Society's Guide to Forensic Human Factors (1987-2012)*. Santa Monica, CA: Human Factors & Ergonomics Society.
13. Resnick, M., & Cohen, J. (2014). Workplace issues in forensic human factors. In *The Human Factors and Ergonomics Society's Guide to Forensic Human Factors (1987-2012)*. Santa Monica, CA: Human Factors and Ergonomics Society.
14. Martin, J. A., Cohen, J., & Stokes, A. (2018). Understanding and evaluating eyewitness recall of events. Human Factors and Ergonomics Society 2018 Annual Meeting, Philadelphia, PA.
15. Young, J., Muttart, J., Suway, J., & Cohen, J. (2017). Nighttime photography & videography: Techniques & tips. Human Factors and Ergonomics Society 2017 Annual Meeting, Austin, TX.
16. Cohen, J. (2015). Benefits of ergonomics certification and Q&A session. International Meeting of the Human Factors and Ergonomics Society, Los Angeles, CA.
17. Cohen, J. (2015). Ergonomics certification: A quick guide to getting certified. Ergo X, Anaheim, CA.
18. Kuzel, M., Cohen, H. H., Rauschenberger, R., & Cohen, J. (2013). Evaluation of mobile eye tracking for forensic analysis of pedestrian falls, 57th Annual Meeting of the Human Factors and Ergonomics Society.
19. Sloan, G.D., Nemire, K. E., Cohen, J., Resnick, M. L., & Cloutier, C. (2012). Examples of how to present human factors testimony to the trier of fact, 56th Annual Meeting of the Human Factors and Ergonomics Society.
20. Thompson, D., Cohen, H. H., & Cohen, J. (2011-2013). How to be an effective human factors/ergonomics expert witness workshop, 55th - 57th Annual Meetings of the Human Factors and Ergonomics Society.
21. Cohen, J. (2010). 10 human error myths. American Society of Safety Engineer's Rethink Safety: A New View of Human Error and Workplace Safety Symposium, San Antonio, TX.
22. Cohen, J., & Cohen, H. H. (2009). Spontaneous combustion of oil-based wood finishing products: Hidden or obvious hazard. 53rd Annual Meeting of the Human Factors and Ergonomics Society.
23. Cohen, J. (2009). The role of a just culture. Presentation at the American Society of Safety Engineer's Building a Successful Safety Culture Symposium, Costa Mesa, CA.
24. Halford, V., & Cohen, J. (2008). Cognitive reasoning in diabetes self-care and management. In the proceedings of Improving Patient Safety 2008: From Safe Design to Safe Practice, Cambridge, UK.
25. LaRue, C. A., Cohen, H. H., & Cohen, J. (2007). Limitations of Present Codes and Guidelines in the U.S. for Bleacher Safety in Preventing Fall Injuries. Presented at the International Conference on Slips, Trips, and Falls 2007: From Research to Practice at the Liberty Mutual Research Institute for Safety, Hopkinton, MA.
26. Cohen, J., & Cohen, H. H. (2007). Enhancing forensic human factors/ergonomics analyses using digital surveillance video, 51st Annual Meeting of the Human Factors and Ergonomics Society.
27. Cohen, J., & Imada, A. S. (2005). Ergonomic evaluation in a beverage and food service application. In the proceedings of the 49th Annual Meeting of the Human Factors and Ergonomics Society.

28. Cohen, J., & Cohen, H. H. (2005). A case study in macroergonomics, forensics and call center work. In the proceedings of the 49th Annual Meeting of the Human Factors and Ergonomics Society.
29. Cohen, J., Baniasadi, M., Womble, J., Flot, D. T., & Michael, P. G. (2005). An examination of electronic performance monitoring, procedural justice, and stress. Poster presented at the 20th Annual Conference of the Society for Industrial Organizational Psychology, Los Angeles, CA.
30. Cohen, J. & Cohen, H. H. (2001). Hold on! An observational study of staircase handrail use. In the proceedings of the 45th Annual Meeting of the Human Factors and Ergonomics Society.
31. Cohen, J. (1999). The effects of human factors expert testimony and staircase design on allocation of responsibility in a premises liability case. A poster presented at the 43rd Annual Meeting of the Human Factors and Ergonomics Society.