

Ravishankar Rajaraman

Technical Director
Chairman-RASSI Steering Committee
Council Member, IRCOBI



Summary

Mr. Ravishankar Rajaraman is the Technical Director for JP Research India Pvt. Ltd., Chairman of the Technical Steering Committee for RASSI (Road Accident Sampling System – India), a consortium of automotive companies supporting a pioneering initiative of creating a real-world in-depth road traffic accident database for India, and a council member of the International Research Council on Biomechanics of Injury (IRCOBI).

He holds a Master’s degree in Automotive Engineering from Lawrence Technological University, USA and a Master’s degree in Traffic Accident Research from Graz University of Technology, Austria. At JP Research, Mr. Rajaraman provides his expertise to conduct on-site crash investigations, accident reconstructions, injury data scaling techniques and data collection methodologies. Leading a team of passionate engineers and researchers, Mr. Rajaraman has helped develop the first in-depth road traffic accident database in India, called RASSI, and has also conducted crash investigations and accident reconstructions for various clients and project. In addition, Mr. Rajaraman also provides road safety engineering services for road engineering improvements, and training services for capacity building in accident research. Mr. Rajaraman is also instrumental in writing JP Research India’s newsletter, Safety Speak!, which focuses on India-specific road and traffic safety research.

Skills and Expertise

- Crash investigation and in-depth accident data collection
- Crash reconstruction including PC Crash Accident Reconstruction Software
- Road Safety Survey and Risk Assessment
- Data analysis and reporting
- Project Management
- Training and Human Resource Management
- Marketing and Business Development
- Office administration
- Technical writing

Academic Qualifications

MEng. Traffic Accident Research	Graz University of Technology, Graz, Austria	2015
MS, Automotive Engineering (Dual-country program)	Lawrence Technological University, Michigan, USA International Institute of Information Technology, Pune, India,	2007
BE, Automobile Engineering	M. H. Saboo Siddik College of Engineering, Mumbai, India	2003

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Work Experience

JP Research India Pvt. Ltd.

Technical Director: 2014 – Present
Manager – Safety Group 2011: 2014
Project Manager: 2008 – 2011

Responsibilities:

- Coordinating and conducting technical activities under RASSI.
- Technical advancement of JPRI expertise in accident research.
- Managing projects related to on-site crash investigations, crash reconstructions, road safety engineering, training and conferences.
- Managing India operations, including human resources, administration, employee health and safety, and business development.

Insurance Institute for Highway Safety

Ruckersville, Virginia (USA)
Engineering Intern: 2007

Responsibilities included incorporating and implementing DTS-TDAS data acquisition system for the SID-IIs and BioRID dummies; post-processing of dummy calibration data using Visual Basic; and assisting in dummy/sensor calibration, sensor troubleshooting and dummy teardown activities. Also aided in research work on rear-impact head rebound analysis and side impact crash data analysis, and aided in the bumper test activities. Required to observe (and understand) crash test protocols and calculation of vehicle ratings for the frontal-offset, side-impact, rear-impact, and bumper tests.

SAE Automotive Headquarters

Troy, Michigan (USA)
Ground Vehicle Standards Inter: 2007

Responsibilities included understanding how standards and regulations are developed, then performing global standards and regulations mapping using MS Access.

BASF

Wyandotte, Michigan (USA)
Co-Op: 2007

Responsibilities included monitoring the manufacturing of suspension jounce bumpers and performing Statistical Process Control using Minitab software.

Mechatronic Systems Engineering, Lawrence Technological University

Michigan, USA
Student Assistant to the Program Director: 2006

Responsibilities included developing course material (using MS Power Point), assisting in vehicle dynamics research using Matlab, and proctoring tests for undergraduate students.

Tata AIG General Insurance Co. Ltd.

Mumbai (India)
Executive – Claims: 2003-2005

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Responsibilities included handling automobile insurance claims, performing loss assessments, developing computer based testing and training modules for loss assessors, and generating motor claims reports and data analysis. Served as Trainer and Training Coordinator for automotive technical and loss assessment training programs for in-house loss assessors. Provided training on loss assessing basics, powertrains, electrical systems, HVAC systems, body repair, automotive refinishing, and insurance fundamentals. Also, Project Manager for PDA based Loss Assessment and Computer Based Training Modules.

Awards

- **President and CEO's Quality Award (2015)**
JP Research India Pvt. Ltd.
 - **International Student Leadership Award (2007)**
Lawrence Technological University
 - **Super Achiever Award (March-May 2005)**
Tata-AIG General Insurance Company
 - **Extra-miler Award (September 2004)**
Tata-AIG General Insurance Company
 - **SAE International Outstanding Contribution Award (2000-2001)**
SAE Student Chapter, M.H. Saboo Siddik College of Engineering
 - **SAE International Outstanding Student Officer Recognition Award (2001-2002)**
SAE Student Chapter, M.H. Saboo Siddik College of Engineering
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Publications / Presentations

"Risk of severe injuries to vehicle occupants in frontal crashes on Indian roads", IRCOBI Asia 2016, Seoul, South Korea, (with T. Moore, S. Balakumar and J. Padmanaban).

"The New In-Depth. At-Scene, Accident Investigation Database in India", 2013 IRCOBI Conference, Gothenburg, Sweden, 13 September 2013 (with N.Rameshkrishnan, A. Sathyakumar, S. Balakumar, A. M. Hassan, and J. Padmanaban).

"Analysis of Fatal Chennai Crashes City's Metropolitan Transport Corporation(MTC) Buses", ICRASH 2010, Washington DC, USA, 24 September 2010.

"Analysis of In-Depth Crash Data on Indian National Highways and Impact of Road Design on Crashes and Injury Severity", 4th International ESAR Conference, Hanover, Germany, 17 September 2010.

"Heavy Truck Crash Investigation and Data Collection Methodology on Indian National Highways", 4th International ESAR Conference, Handover, Germany, 17 September 2010.

"Crash Investigation and In-depth Accident Data Collection", SAFE Annual Convention 2010 organized by the Society of Indian Automobile Manufacturers (SIAM), Chandigarh, India, 5 May 2010.

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SAE Paper No. 2009-28-0056 “Analysis of Traffic Accidents on the NH45 (Kanchipuram District)”, SAE India Mobility Engineering Congress and Exposition, Chennai, India, 13-15 December 2009.

Poster presentation on “Analysis of truck accidents on the NH45 and the urgent need for in-depth truck accident data collection on national highways”, SAE India Mobility Engineering Congress and Exposition, Chennai, India, 13-15 December 2009.

“Crash Investigation and Accident Data Collection – A TamilNadu Case study”, 4th IRF Regional Conference, New Delhi, India, 23-24 October 2009.

Poster presentation on “Analysis of Traffic Accident on the NH45 (Kanchipuram District)”, 4th IRTAD Conference, Seoul, South Korea, 16-17 September 2009.

SAE Paper No. 2009-26-008 “Accident Data Collection Methodology for building a Traffic Accident Database for Tamil Nadu (India)”, Symposium of International Automotive Technology (SIAT) 2009, Automotive Research Association of India, Pune, India, 21-23 January 2009.
