

Joey K. Parker, Ph.D., P.E.

3 Axis Engineering, LLC

5929 Knight Ave.

Tuscaloosa, AL 35405

Phone: 205-758-4488

Fax: 205-758-4489

E-mail: joey@3axisllc.com

EDUCATION

1985 Doctor of Philosophy in Engineering, Clemson University
1981 Master of Engineering in Mechanical Engineering, Clemson University
1978 Bachelor of Science in Mechanical Engineering, Tennessee Technological University

REGISTRATION

2004 to Professional Engineer, Alabama, #26337
2017

ACADEMIC EXPERIENCE

1985 to The University of Alabama, College of Engineering
2011 Associate Professor of Mechanical Engineering, 1991
Assistant Professor of Mechanical Engineering, 1985

1981 to Clemson University, College of Engineering
1985 Visiting Instructor, Department of Mechanical Engineering, 1983
Graduate Teaching Assistant, Department of Mechanical Engineering, 1981

INDUSTRIAL EXPERIENCE

1987 to CCSports Associates, New Haven, CT
2002 Technical Consultant.
Designed and developed microcontroller based system for a low-cost graphics video overlay system ("The Coach's Pad") used by professional, college, and high school athletic coaching staffs.

1978 to Badische Corporation, Anderson SC (now Fibers Division of BASF)
1981 Mechanical Engineer, Research and Development Department.
Designed, installed, and tested components for a state-of-the-art, highly automated process for the manufacture of nylon carpet yarn

SUMMER EXPERIENCE

NASA-ASEE Summer Faculty Fellowship, Marshall Space Flight Center, Huntsville, AL
1993 Developed simulation model and debugged control system for a brushless DC motor controller for propellant control valve application.
1986 and Developed computer vision software for the Mechanics of Granular
1987 Materials Experiment.

PROFESSIONAL DEVELOPMENT COURSES TAKEN

- 2017 Human Factors in Traffic Crashes: Pelham AL, November 13-17
- 2015 HVE Forum (EDSMAC4, SIMON), Engineering Dynamics Corp., Austin, TX, Mar 2-6.
- 2013 Advanced Crash Reconstruction Utilizing Human Factors, Northwestern University Center for Public Safety, Evanston, IL, May 20-24.
- 2012 Crash Data Retrieval Analysis Course with Advanced Analysis Using the Bosch Crash Data Retrieval System, CDR Trainers, Hattiesburg, MS, Dec. 4-7.
- 2011 Accessing and Interpreting Heavy Vehicle Event Data Recorders, SAE International, Chatlotte, NC, May 17-20.
- 2009 Investigation of Motorcycle Crashes, Institute of Police Technology and Management (IPTM), Tampa, FL, Aug. 10-14.
- 2008 CDR (Crash Data Retrieval) Data Analyst Certification, Collision Safety Institute, New Orleans, LA, June 24-27.
- 2008 Human Factors In Traffic Crash Reconstruction, Institute of Police Technology and Management (IPTM), Jacksonville, FL, June 9-13.
- 2007 Motorcycle Safety Foundation Rider Course, University of Montevallo, Montevallo, AL, Nov. 2-4.
- 2007 Highway Event Data Recorder Symposium: 2007 Update, SAE International, Ashburn, VA, Sept. 5-6.
- 2007 Commercial Vehicle Braking Systems e-Seminar, SAE International, June-July.
- 2006 Caterpillar – Electronic Technician for On-Highway Trucks Customer Class Thompson Tractor Co., Birmingham, AL, Aug. 9.
- 2006 HVE Forum (SIMON), Engineering Dynamics Corp., Phoenix, AZ, Feb. 20-22.
- 2006 EDCRASH Reconstruction, Engineering Dynamics Corp., Northside, CA, Jan. 16-20.
- 2003 Air Brake Systems Product School, Bendix, Elyria, OH, Nov. 3-6.
- 2003 Vehicle Dynamics for Passenger Cars and Light Trucks, SAE International, Troy, MI, Sept. 17-19.
- 2003 Police Traffic Accident Investigation 19 Update, Crash Data Retrieval Training and Crash Data Retrieval Update Training, Michigan State University Highway Traffic Safety Program, Mar. 10-12.
- 2002 Collision Reconstruction, Texas Engineering Extension Service, Plano TX, July 22-Aug. 2.

PROFESSIONAL DEVELOPMENT COURSES & SEMINARS TAUGHT

- 2016 CDR System Operators Course - Bosch Crash Data Retrieval System, Montgomery Police Department, Montgomery, AL, May 25 (with J. Hunter).
- 2015 Accident Reconstruction - Your Questions Answered, The Bootcamp for Litigating an Automobile Accident Case, The University of Alabama School of Law, Tuscaloosa, AL, Sept. 25.
- 2015 Traffic Accident Reconstruction - What Happened?, Alabama Criminal Defense Lawyers Association DUI/Traffic Homicide Seminar, Montgomery, AL, Aug. 7.

PROFESSIONAL DEVELOPMENT COURSES & SEMINARS TAUGHT (Cont'd)

- 2015 Accident Investigation - What You Can Do to Help Determine What Happened?, Second Annual Transportation Safety Summit, Chattanooga, TN, May 14.
- 2013 Protecting EDR Information, ABA Tort Trial & Insurance Practice Section, TIPS Fall Leadership Meeting, Minneapolis, MN, Oct. 9.
- 2012 On Scene Accident Investigation – What You Need to Document, 13th Annual Conference Public Employees Safety Council of Alabama, Clanton, AL, Nov. 14 (with J. Hunter)
- 2012 Heavy Vehicle Event Data Recorders - HVEDR, Ontario Provincial Police, Toronto, ON, Mar. 19-22 (with A. Powers).

ACADEMIC COURSES TAUGHT

- AEM 264 Dynamics
- GES 131 Foundations of Engineering I
- GES 132 Foundations of Engineering II
- ME 110 Intro to Mechanical Engineering
- ME 349 Numerical Methods
- ME 360 Instrumentation & Control Comp.
- ME 363 Dynamics of Machinery
- ME 372 Dynamic Systems
- ME 460 Advanced Instrumentation
- ME 464 Mechanization of Automation
- ME 465/565 Introduction to Automated Manufacturing Systems
- ME 467 Robotics and Control Hardware
- ME 475 Control Systems Analysis
- ME 489 Mechanical Engineering Design I
- ME 490 Mechanical Engineering Design II
- ME 491/591 Vehicle Dynamics
- ME 577 Advanced Linear Control

PATENTS

- 4,783,107 Method and Apparatus for Controlling Impact Force During Rapid Robotic Acquisition of Object, November 8, 1988 (with Frank W. Paul).
- 4,715,773 Method and Apparatus for Repositioning a Mislocated Object with a Robot Hand, December 29, 1987 (with Frank W. Paul).

PROFESSIONAL AND HONOR SOCIETIES

- American Society of Mechanical Engineers
- Society of Automotive Engineers
- Pi Tau Sigma and Tau Beta Pi (honorary engineering societies)