



DEREK A. KING, M.S., P.E.
Mechanical and Electrical Engineer

SUMMARY

Prior to joining Berkeley Engineering And Research, Inc., Mr. King was an assistant engineer for Lawrence Berkeley National Laboratories and was responsible for data collection, programming, and system testing for the analysis of energy loss in residential hot water systems. Mr. King's broad engineering work with BEAR has played an integral role in developing his expertise in applied research, machine design, prototyping, failure analysis, and both destructive and non-destructive testing. His dynamic problem-solving abilities continue to assist BEAR's Principal Engineers with damage assessment and complicated incident investigations. In 2015, he was promoted to "expert" to lead cases focused on product design failures as well as consulting for the oil and gas industry. His education in the field of mechanical engineering has been enhanced in 2020 by receiving a Masters Degree in electrical engineering. Additionally, he manages the BEAR college internship program. He is also a registered professional engineer in the State of California.

SELECT INDUSTRY EXPERIENCE

Oil & Gas Industry, Construction, Manufacturing, Failure Analysis, Consumer Products, Automotive, Recreational Equipment, Lithium-Ion Batteries, 3D Scanning, Machine Shop, Pipeline Failure, Pressure Vessels, Analog Circuits, Programming, Site Inspections, R&D Projects, Prototyping

EDUCATION

M.S in Electrical Engineering from Ohio University
B.S. In Mechanical Engineering from U.C. Berkeley

PROFESSIONAL EXPERIENCE

2009 – present

Mechanical & Electrical Engineer - Berkeley Engineering And Research, Inc.
Engineering Research, Design and Failure Analysis, Programming, Inspection Services

Mr. King has over 10+ years of experience identifying the root cause of failures and creating innovative and targeted solutions. He regularly designs and prepares experiments for automotive, consumer products, and other applications to aid in failure analysis. His skills include ISO & Safety Compliance for the Gas & Oil Industry, design and fabrication, and technical justification for design decisions and expert opinions. His responsibilities include subsequent data and error analysis and the iterative process of refining experimental parameters and comprehensive documentation. He manages BEAR contracts with Chevron, Phillips66 and Marathon Oil to provide onsite inspections by collecting laser scan data of coke drums at oil refineries, performing data analysis, applies ASME Boiler and Pressure Vessel code, and assisting with programming solutions. He provides machine shop and engineering for the BEAR team to aid in destructive and non-destructive field testing, and maintains a proprietary software library.