resume\_71@gmail.com  
(699).135.2350  
Mark Mckenna  
Chief Scientist Unmanned Systems Division - APPLIED RESEARCH ASSOCIATES INC  
White River Junction VT - Email me on Indeed: indeed.com/r/Mark-Mckenna/7ec9e42dca7d6a0a  
WORK EXPERIENCE  
Senior Scientist  
APPLIED RESEARCH ASSOCIATES INC - Randolph VT - 2009 to Present  
Randolph Vermont 2009-current  
Sensing instrumentation and application development organization with 1220 employees.  
Senior Scientist  
Lead scientist for nonlinear acoustic detection of concealed weapons for Department of Defense Joint IED Defeat Organization using phased microphone array. Lead scientist for project for Department of Homeland Security in continuation of project from Luna Innovations. Improvements to system with hardware integration of multiple axis scanning system for receivers and software improvements to speed scanning feature extraction and classification using Matlab and Labview.  
Senior Research Scientist  
LUNA INNOVATIONS INC - Hampton VA - 2005 to 2009  
Win more than $2M in program contracts by collaborating with prospects and current clients to determine sensor needs and building business case through data collection analysis and the development of technical reports and proposals. Direct team of up to 3 to manage all measurement science and instrumentation development activities; orchestrate new laboratory techniques Ensure achievement of programs by effectively managing relationships with vendors defense department prime contractors and industrial aerospace companies including NASA Boeing Aerojet and EPRI.  
Key Contributions:  
 Served as lead scientist resulting in office securing multi-million dollar contract from DHS.  
 Asked to serve as technical reviewer within NASA's peer review process.  
 Led office in program wins for past two years with highest proposal value  
 Research for Boeing 787 Dreamliner lead to patent application on fastener characterization  
Key Projects:  
 Enabled measurements of stress to characterize aerospace fasteners and cold worked zones including transducer development;  
 Partnered with the Department of Homeland Security to discover a way to detect concealed weapons explosives and IED devices from a distance;  
 Leveraged nonlinear acoustics to characterize welds for NASA's ARES launch vehicle;  
 Developed high-power RF test and measurement electronics - featuring instrument control and utilizing both analog and digital circuitry - via LabView.  
MARK MCKENNA PhD mark.j.mckenna@gmail.com  
Executive Vice President  
RITEC - Warwick RI - 1995 to 2005  
Served in dual role as senior executive and research program manager to grow annual sales from $350K to $1M during tenure; partnered with international clients on various semi-conductor and RF  
   
projects and provided training and foreign sales development. Oversaw day-to-day operations of 10-person office including sales customer development customer support software development and instrumentation engineering activities.  
Key Contributions:  
 Delivered additional revenues by securing win of SBIR Phase II grant for microcavitation controlled ultrasonic cleaning of semiconductor wafers.  
 Realized development and launch of 4 new instruments and revised 2 additional instruments during tenure; including spearheading 2 custom instruments for Lockheed and Sumitomo Metals Technology.  
 Commanded expertise in Visual Basic Labview and C/C++ to develop RF test and measurement electronics with analog and digital circuitry.  
Associate Lecturer Physics Department  
UNIVERSITY OF WISCONSIN-MILWAUKEE - Milwaukee WI - 1993 to 1995  
Enhanced school credibility and grew enrollments in introductory physics course while serving in joint position as course lecturer and researcher of material properties of high-temperature superconductors. Published several research advancements and received multiple distinctions in peer-reviewed scientific journals including Physical Review Letters.  
Key Contributions:  
 Developed precision ultrasonic measurement system.  
 Authored solutions manual for intermediate thermodynamics textbook.  
 Realized increased enrollment in introductory course after completing survey project and recommending improvements to the undergraduate supervisor.  
 Selected for numerous honors including serving as session chair for the national conference and publication of physics demonstration video throughout media nationwide.  
EDUCATION  
Master of Science in Physics  
Brown University - Providence RI  
Bachelor of Science in Physics  
Georgetown University - Washington DC  
SKILLS  
Labview Matlab RF Circuit Design High Power RF  
AWARDS  
ARA Scientist of the Year 2013  
May 2013