**Summary**

Experienced systems engineer with a demonstrated history of leading multi-disciplinary teams to develop emerging imaging and sensor technologies. Proven success in managing project scopes, budgets, schedules, and deliverables through the project lifecycle. Innovative problem solver with a passion for fact-based decision making to promote product growth. Solutions oriented and hands-on approach in tackling projects and accomplishing goals while adapting to the ever-changing environment.

**Employment History**

**PHILIPS HEALTHCARE**

**Senior Clinical Scientist**, Philips Ultrasound, Bothell, WA *2021 – present*

* Translate customer needs into product specification by leveraging my scientific expertise
* Act as intermediary between customer & NPI teams to ensure focus on customer needs when designing solutions
* Responsible for task definition, prioritization, and stakeholder management as an Agile Product Owner
* Manage technical aspects of the programs for partnership with external 3rd party in medical imaging AI space
* Build long term partnerships and collaborative relationships with leading hospitals and medical institutions
* Support roadmap discussions regarding industry trends and future customers applications solutions

**GENERAL ELECTRIC COMPANY *2016*** *–* ***2021***

**Lead Scientist**, GE Global Research, Niskayuna, NY *2019 – 2021*

* Manage $0.5M/yr project to integrate & test state-of-the-art 2D array probe on GE’s premium ultrasound system
* Lead a multi-disciplinary, multi-site team through project definition, scheduling, budgeting, tracking deliverables, reporting progress, and communicating key results to the stake holders while incorporating their feedback.
* Analyze and manage multiple work streams to include prioritization of schedule, resources and distinct project deliverables while continuously incorporating feedback from stakeholders
* Identify project risks, develop mitigation strategies to lessen or retire risks, pivoting as necessary
* Acquire and share data with customers and stakeholders to support optimal project decision making
* Discover creative ways to engage experts to problem-solve & remove roadblocks leveraging unique skillsets

**Research Scientist**, GE Global Research, Niskayuna, NY *2016 – 2019*

* Played lead role in developing key features and enabling novel applications on GE’s Vivid E 95 and Logiq E10 premium scanners
* Adapted C++ code and modified software resources to enable electronic 4D probes with GE’s VE95 ultrasound scanners for image guided therapy and multi-modality imaging applications
* Configured and verified ASIC setup & reported beamforming performance using MATLAB simulations
* Measured acoustic outputs and safety metrics according to FDA, IEC standards for new and prototype probes
* Identified failure modes for the probes and assessed their impact using failure mode effect analysis (FMEA) tools
* Engaged expert clinicians and application specialists to get their insight into customer and market needs
* Applied six sigma and lean principles to improve the product quality and customer satisfaction

**UNIVERSITY OF KANSAS *2006*** *–* ***2016***

**Graduate Research Assistant (Ph.D.)**,Center for Remote Sensing of Ice Sheets, Lawrence, KS *2010 – 2016*

* Led inter-disciplinary team of 10 undergraduate and graduate students through system design, development, integration, testing of Ku-band radar altimeter for measuring surface elevation of ice.
* Collaborated with scientists and program managers at NASA to develop state-of-the-art radar systems to acquire ice sheet and sea ice data over the polar regions.
* Collaborated with academic partners and federal agencies including National Science Foundation, European Space Agency (ESA), Alfred Wagner Institute and Norwegian polar institute to adapted radar systems for their field experiments and thus enabling calibration and validation of CryoSat-2 satellite radar data.
* Analyzed radar data and generated data products to enable the scientific communities to generate climate models & estimate the impact of change in volume and extent of polar ice cover on sea-level and global climate.
* Mentored undergraduate and graduate students on their academic course work as well as research related to radar system development

**Research Engineer** Center for Remote Sensing of Ice Sheets, Lawrence, KS *2009 – 2010*

* Designed and built the radar sub-systems including transmitter, receiver, signal generator, digital system for four radar systems with different operating parameters and applications
* Defined frequency, power and stability requirements, component needs and system architecture
* Communicated with sales and technical engineers from industry to procure system components
* Calibrated/tested components such as amplifiers, mixers, cables & antenna using network & spectrum analyzers
* Performed circuit design simulations using SPICE and Advanced Design System (ADS) tools
* Generate printed circuit board layouts, populated PCBs and generated CAD drawings for system integration
* Documented system performance, generated results, reported the results and analysis in several publications

**Graduate Research Assistant (M.S)**,Center for Remote Sensing of Ice Sheets, Lawrence, KS *2006 – 2009*

* Teamed with interdisciplinary students and faculty for signal processing and quality control of ice sheet radar data
* Programmed signal processing algorithms using Matlab to process data and extract properties of ice
* Analyzed data for noise sources, implemented filtering and deconvolution to improve signal-to-noise ratio
* Developed tracking algorithms to track ice surface and analyzed statistical variation in the tracked surface.

**Education**

**Ph.D. Electrical Engineering**, University of Kansas (KU), GPA 4.0/4.0 *Aug. 2016*

Focus: Systems engineering, sensor design and development, signal and image processing, statistical data analysis

**M.S. Electrical Engineering**, University of Kansas, GPA 3.75/4.0 *May 2009*

Concentration: Microwave and RF systems, electromagnetics, signal processing, random signal theory, digital and wireless communications systems.

**B.S. Electronics and Communication Engineering**, Osmania University, GPA 3.50/4.0 *June 2005*

**Service, Honors and Awards**

**Chair,** IEEE UFFC-S Industrial Engagement Committee*2019 – present*

**Mentor**, Cultivate Class of 2020, GE Research *2020 – 2021*

**Authentic leadership GE Crotonville course,** GE Research*June 2019*

**Project Lead,** Cultivate Leadership Class, an intensive program for top female early career, GE Research *2018 – 2019*

**Greenbelt, Lean Six Sigma Certification** *January 2019*

**GE Edison Engineer hiring committee**, GE Research  *March 2018*

**Vice Chair, IEEE Schenectady Section**, Membership,Executive Committee *2017* –*2018*

**Vice President,** Toastmasters GE Research 2017 –2018

**Excellence** **in** **Teaching** **Award**, Center for Teaching Excellence (KU) *May 2015*

**Chief Coordinator**,ADSOPHOS 2K5, A National Technical Symposium; over 2,000 attendees *Jan. 2005*

**Chair, Student Chapter IEEE, Osmania University** *2004-2005*

**Professional Memberships**: [IEEE](http://www.ieee.org/), IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society, Society of Women Engineers (SWE)