




Srihari Yamanoor

 yamanoor@stanfordalumni.org

 (650) 387 1207

 <http://yamanoor.info/>

 San Jose, CA 95112

 <http://linkedin.com/in/yamanoor/>



SUMMARY

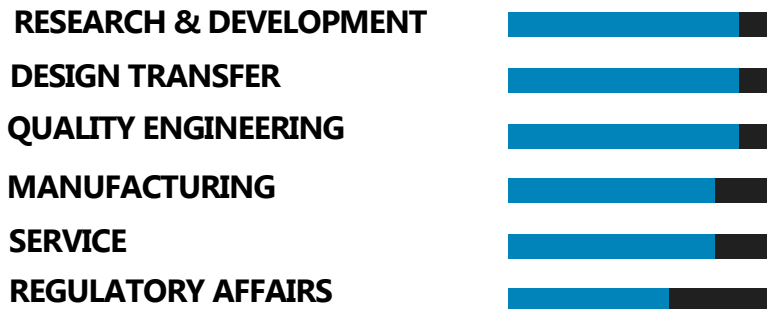
- Mechanical Engineer with extensive experience in Medical Device Design, CAD and Sustainability spanning all the stages of the Product Lifecycle.
- Excel at working on problems from the conceptual stage to the well-defined, time bound, stage.
- Seeking challenging opportunities focused on innovation, with potential for immense professional growth.



INTERESTS

- Research
- Design & Development
- Design Transfer & NPI
- Manufacturing
- Sustainability
- Quality Engineering

EXPERIENCE



PROFESSIONAL CERTIFICATIONS



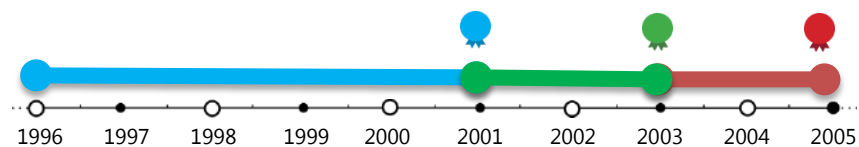
Certified Reliability Engineer (CRE)
Certified Quality Engineer (CQE)
Certified Software Quality Engineer (CSQE)
Certified Supplier Quality Professional (CSQP)
Certified Quality Auditor (CQA)
Certified SolidWorks Expert (CSWE)
Certified Enterprise PDM Professional (CEPP)
Certified Sustainability Design Associate (CSDA)
Certified SolidWorks Instructor (CSWI)

PROFESSIONAL MEMBERSHIPS



AAAS | ASME | ASQ | IEEE | ISO/TC 279 | RAPS

EDUCATION



- Degree of Engineer, Mechanical Engineering, Stanford University, 2005
- Master of Science, Mechanical Engineering, Stanford University, 2003
- Bachelor of Engineering, Mechanical Engineering, PSG College of Technology, India, 2001

BOOKS



Python Programming with Raspberry Pi Zero, April 2017
Raspberry Pi Mechatronics Projects HOTSHOT, February 2015

KEY INVENTIONS



Target Tissue Locator For Image Guided Radiotherapy
US PCT/US2007/088031
Vaginal remodeling device and method
US 20130245728 A1



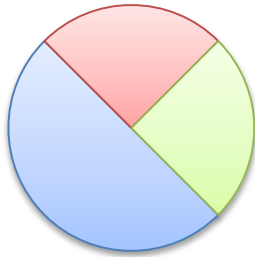
WORK EXPERIENCE

Stellartech Research Corporation



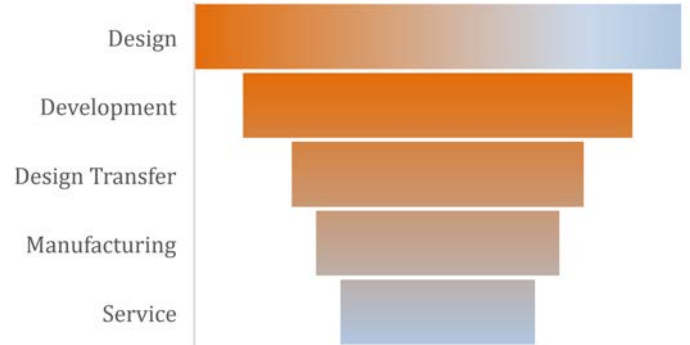
MAY 2011 – Present

Device Types

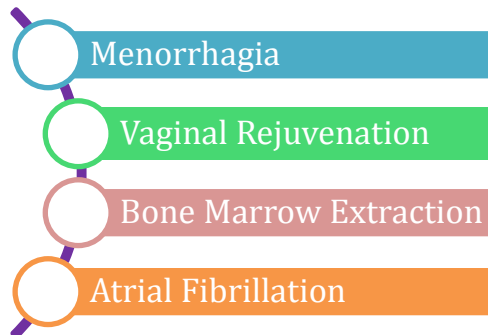


■ Disposables
 ■ Midsize Equipment
 ■ Capital Equipment

Function Types



Health Conditions



- Led changes to commercial vaginal rejuvenation product. Implemented several reliability and performance improvements, supervised Design Transfer, New Product Introduction, Scaled Manufacturing, and exceeded both internal and customer goals. Shipped 68 capital & mid-sized equipment in 2015, ramped to 232 units in 2016, for over \$6mn. in revenue.
- Led changes to the vaginal rejuvenation product's disposable. Implementation of RoHS compliance, cybersecurity and SHAM protocol led to 4000 disposables for over \$800,000 revenue in 2015 & 2016.
- Implemented RoHS Compliance Updates and Cybersecurity Improvements for the capital, midsize and disposable equipment for the vaginal rejuvenation product, integrated, verified, released and shipped the product after appropriate documentation updates.
- Led the development of SHAM disposables for the implementation of double blinding in clinical trials that mimics the treatment, maintaining safe operations and delivering negligible energy. At least 1000 tips have been manufactured and used in clinical trials.
- Supported intellectual property development for product development and improvements to the vaginal rejuvenation device, that resulted in patent applications in multiple countries.
- Restarted service processes after business was re-established with vaginal rejuvenation product customer, and completed all pending service requests performing engineering forensics and root cause analysis; initiated new service processes and streamlined service.
- Redesigned Internal Module Housing for Handheld Plasma Delivery Device, simplifying design for functionality & manufacturability saving costs ~25%.
- Developed prototype, with detailed, supporting FEA to demonstrate proof for a bipolar ablation device using magnetic tracking to treat cardiac atrial fibrillation. Prototype was used for fundraising activities.
- Lead Engineer on product development for innovative bone marrow collection device and accessories, including failure analysis through metallography and FEA to aid fundraising.
- Supported product development for disposable menorrhagia treatment device. Provided pre-clinical testing support through protocol creation, data acquisition and treatment parameter determination.
- Developed a marketing model used to describe varicose vein treatment. This was used successfully in two large conferences for effective demonstrations to physicians, investors, and others.



WORK EXPERIENCE

- Hawk Ridge Systems

MAR. 2008 – MAY 2011



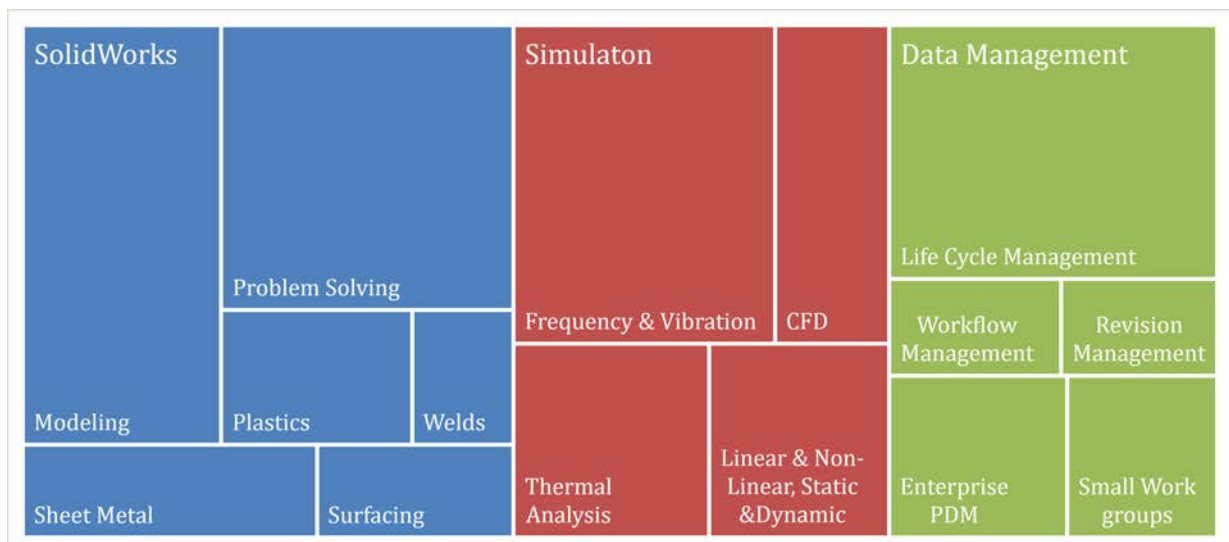
3D Printing & CAM



Data Management



Modeling & Analysis



- Advised customers on specific CAD strategies for optimal CAD system implementation, CAD and Product Data Management (PDM), product development and sustenance.
- Achieved several certifications in SolidWorks, Simulation, Data Management and Sustainability.
- Provided Engineers with Design & Analysis Support on SolidWorks and Simulation in Design and Engineering for medical devices, energy and space system development, and consumer products.
- Developed expertise in design and troubleshooting on all key aspects of SolidWorks CAD & Simulation, Surfacing, Molds, Sheet metal, Welding, Routing, Data Management, Flow Simulation & Sustainability.
- Conducted Professional Training, including a 5-day monthly, introductory SolidWorks course. Conducted 30 sessions, training over 200 engineers and designers.
- Additionally, conducted Advanced Detailing, Advance Part Modeling and Advanced Surface Modeling Courses along with courses tailored to specific medical device design clients.
- Accomplished redesign of Training Systems, including course design, content, delivery and infrastructure support to meet the demands of a growing, diverse, customer base.
- Provided Insides Sales Professionals with support on product demonstrations to prospective customers based on a clear understanding of the competitive performance of various products in the market
- Assumed leadership in SolidWorks Sustainability, providing demos & training in engineering conferences.



WORK EXPERIENCE

- **Boston Scientific Corporation**



AUG. 2007 – FEB. 2008

- Evaluated and made recommendations for redesign of various wire components for catheter product.
- Worked with peers to develop and execute novel test methods for components, sub-assemblies and finished product for a redesign of an embolic protection device.
- Developed test method plans, test methods and fixtures for R&D of new embolic protection device using Design of Experiment Strategies.
- Interacted extensively with vendors to specify and develop new designs and prototypes.
- Performed grain size evaluations to correlate mechanical property variations in catheter components

- **MicroCube, LLC**



APR. 2007 – JUL. 2007

- Conceptualized several mechanical and mechanical-chemical ablation system designs and configurations to help development a new, cost effective treatment for menorrhagia
- Designed Protocol and Performed Bench-top Experiments to validate several ablation techniques using porcine heart, porcine and bovine uteri.
- Arrived at Design Requirements for product development in two important Women's Health areas

- **Cytyc Surgical Products**



MAY 2006 – MAR. 2007

- Characterized and identified market opportunities based on disease incidence and mortality to aid technology and business development and expansion as well as technology reuse.
- Specifically applied results and identified new opportunities in \$2 billion women's disease condition.
- Led brainstorming sessions with the R&D team to solve technological challenges and develop Intellectual Property. These sessions generated 16 patent disclosures to Cytyc Surgical Products' Patent Review Board during the second half of the Financial Year 2006.
- Published detailed analysis on Clinical Research in India to initiate future clinical trials of the company's prospective products in multiple trial centers in India.
- Delivered scientific answers leading to the PMA approval of a urinary high-dose brachytherapy product development project.
- Identified Design Inputs and strategy improvements for a new plasma based technology aimed at Endometriosis, a widespread disease condition in the women's healthcare market.



AWARDS AND RECOGNITIONS

1. Selected meritoriously as a Young Scientist among 25 outstanding Mechanical Engineering students in India, to participate in the Young Scientists Contact Program organized by the Government of India.
2. Awarded the Best Outgoing Student Award of Undergraduate Class among 54 students by the Alumni Association, PSG College of Technology, Coimbatore, India.
3. Member of Award winning team in the Social e - Challenge contest in the year 2004 for a project titled e – Immunization that uses mobile media for infant immunization in developing countries.
4. Founding President and Co - Chair of Stanford Students for Relief that received the Dean's Outstanding Achievement Award, for leading campus wide fundraising toward Tsunami Relief, 2005
5. 1st place, won SolidWorks 2011 Beta Bug Finding Contest at Hawk Ridge Systems, companywide contest, among 40 Engineers.
6. Team Member, Finalists, Robobowl - Pittsburgh, sponsored by The Robotics Technology Consortium and Carnegie Mellon University, 2011. Awarded Cash Prize, \$5,000.
7. Team Member, 1st place, Hacking Health Hackathon, University of California, Berkeley, September 2012. Programmed the web component of the demonstration and delivered first half of the demonstration.
8. Team Member, 1st place, Sexual Education and Technology (Sex Tech) Hackathon, ISIS Inc., April 2012. Prototyped the entire app using wireframe applications and related tools.



FELLOWSHIP

Fellow, 2018, EnCorps STEM Teachers Program, Tutoring/Guest-Teaching for minority students in Bay Area Public Schools.



PRESENTATIONS

How Artificial Intelligence Is Changing Medical Devices, BIOMEDevice, December 6, 2017, San Jose, California

Embrace New Paradigms to Innovate Continually, ASQ Innovation Division and Akron, Ohio Section Conference, October 2017.

CAD-based Sustainability Tools in Innovation, ASQ Innovation Division and San Diego Section Conference, October 2016.



EXHIBIT

Exhibiting, “**DIY Personal Health Dashboard**”, a Not-For-Profit, Activity Monitor and Dashboarding Digital Health System, Versions 1, 2, and 3, at the following Maker Faires:

1. **Project 63249**, World Maker Faire, New York, September 22-23, 2017.
2. **Project 387**, East Bay Mini Maker Faire, October 22, 2017
3. **Project 20**, Cleveland Mini Maker Faire, November 4, 2017.
4. **Project 58**, Rochester Mini Maker Faire, November 18, 2017.



SPEAKER PANEL

Invited and accepted invitation to participate in a panel discussion, R&D and Design Track, “**Panel: Using Cross Pollination to Drive Medtech Innovation**”, November 8, 2017.



WORKSHOPS

Workshop: Citizen Science through the use of new technologies and paradigms for Environmental Project Success, Sai Yamanoor, Srihari Yamanoor, NAEP 2018, March 14, 2018.

Selected as one of ~15 Subject Matter Experts (SME) to review Certified Reliability Engineer (CRE) Examination Questions for suitability in the new CRE Body of Knowledge (BoK), and to create new questions. June 2017 – October 2017.

Selected as one of 12 Subject Matter Experts (SME) in North America, for 2017, to participate in the **Item Review Workshop** reviewing original Professional Certification Examination Questions for the Certified Supplier Quality Professional (CSQP) Examination, June 9, 10, 2017, ASQ Headquarters, Milwaukee, WI.

Invited and participated in **Innovation Summit**, as Robobowl Pittsburgh Finalist, Carnegie Mellon University, Pittsburgh, PA, October 13, 2011.

Experienced Instructor Meeting, SolidWorks Essentials Instruction Materials Review Workshop, SolidWorks World 2011, January 21, 2011.

Panelist, Stanford University, BASES, Social E-Challenge Workshop, “The Life of a Social Entrepreneur”, January 20, 2005.



PAPERS/ARTICLES

IEEE Spectrum, Power Your Holiday Displays With the \$25 PocketBeagle, Sai Yamanoor, Srihari Yamanoor, December 2017

<https://spectrum.ieee.org/geek-life/hands-on/power-your-holiday-displays-with-the-25-pocketbeagle>

Magpi, Issue 64, DIY Indoor Air-Quality Monitor, Sai Yamanoor, Srihari Yamanoor, December 2017, Pages 50 – 53.

<https://www.raspberrypi.org/magpi-issues/MagPi64.pdf>

Technica Curiosa, Physical Activity Motivation Tool using the Raspberry Pi Zero, Sai Yamanoor, Srihari Yamanoor, December 2017, Pages 97 – 110.

<http://e.issuu.com/embed.html#30247351/54911808>

Frost and Sullivan, Medical Devices, August 2010, Vol. 3, Issue 3

New Medical Device Opportunity: How You Can Benefit from Healthcare Reform

[http://www.growthconsulting.frost.com/web/images.nsf/0/A6F07C43988420A180257775005F59C9/\\$File/DEV%20ebull%20Vol3%20Issue3_Pointofview.html](http://www.growthconsulting.frost.com/web/images.nsf/0/A6F07C43988420A180257775005F59C9/$File/DEV%20ebull%20Vol3%20Issue3_Pointofview.html)

Stanford University, Design of a haptic pantograph for teledermatological applications. Thesis in support of Degree of Engineer, September 2005.



JUDGING

Preliminary Round Judge, ASQ ITEA 2017-2018, October 23-24, 2017, Pomona California.

Semi-Finalists and Finalists Selection Judge, 6th Annual WEGO Health Awards, September 5-11, 2017 and September 14-21, 2017.



COVERAGE

MDDI, How to Identify Crossover Technologies That Work for Medtech, Amanda Pedersen, November 13, 2017.

<https://www.mddionline.com/how-identify-crossover-technologies-work-medtech>

MDDI, Q&A: How to Prepare for an AI-Driven Future, Kristopher Sturgis, November 7, 2017.

<https://www.mddionline.com/qa-how-prepare-ai-driven-future>

Morgan & Claypool, Designing Development, Case Study of an International Education and Outreach Program, Synthesis Lectures on Global Engineering, Aditya Johri and Akshay Sharma, pp 37 – 41, 2013.

Berkeley HAAS, Monthly Archives, September 2012

A Weekend in the Life of a Part-time MBA Student: From Health Hackathon to Tough Mudder

<https://haasachievers.wordpress.com/2012/09/27/a-weekend-in-the-life-of-a-part-time-mba-student-from-health-hackathon-to-tough-mudder/>

Biocurious Kickstarter Campaign, September 17, 2010

[Interviewed and pictured in campaign. Project was successfully funded and launched]

<https://www.kickstarter.com/blog/biocurious-and-the-diy-science-movement>

IEEE Xplore, March/April 2010, IEEE Engineering in Medicine and Biology Magazine (Volume: 29, Issue: 2, March-April 2010), Blogging...again...yes, again?

<http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=5431926>

Patent Baristas, March 17, 2010

50 Best Blogs for Biotech

<http://www.patentbaristas.com/archives/2010/03/17/50-best-blogs-for-biotech/>

Frost and Sullivan, Medical Devices, February 2010, Vol. 3, Issue 1.

Recommended Blog: chaaraka.blogspot.com

[http://www.growthconsulting.frost.com/web/images.nsf/0/D15B9805082C32DA652576C1004DB5C9/\\$File/DEV10_V3Q1_Jessica.pdf](http://www.growthconsulting.frost.com/web/images.nsf/0/D15B9805082C32DA652576C1004DB5C9/$File/DEV10_V3Q1_Jessica.pdf)