

Contact

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(LinkedIn)

Top Skills

Data Analysis

Biomedical Engineering

Matlab

Languages

English (Full Professional)

Nepali (Native or Bilingual)

Certifications

Writing a Resume

Job Hunting for College Grads

Stepping Up to Leadership

Duolingo French Fluency:
Intermediate

Learning Python

Honors-Awards

Queen Elizabeth II Scholarship

NSERC CREATE I3T

2016 Annual Meeting Stipends

Alberta MS Network Travel Award

Graeme Bell Graduate Travel Award

Publications

Correlating new directional measures of myelin and axonal integrity in T2-weighted MRI with quantitative histology in multiple sclerosis

Fourier transform power spectrum is a potential measure of tissue alignment in standard MRI: A multiple sclerosis study

Shrushrita Sharma

Quality Assurance | Agile | Digital Transformation | Biomedical Engineer | Career Mentor | Top Software Testing Voice
Calgary, Alberta, Canada

Summary

As your go-to Quality Assurance Engineer with a passion for finding the tiniest bugs () and squeezing them out of existence(), I thrive on the critical journey of ensuring quality in every digital nook and cranny. Trained in Agile environment, my career has been a thrilling rollercoaster ride of innovation and problem-solving, and I'm here to make sure the software application is smoother than butter on a hot pancake!

With Biomedical Engineering() as my education, I bring forth extra layer of precision and analytical eye to my tasks. I have worked with Medical Imaging Software Application for making clinical decisions and ensuring verification and validation against FDA, and ISO guidelines. In the world of software engineering, even a small glitch can have big impact and in biomedicine, it can be a matter of life and death()! Just like in biomedicine, where every molecule counts, I understand that every line of code matters. It's about ensuring that the systems we build are as reliable as a heartbeat. So, whether I'm troubleshooting a medical device or a software application, my goal remains the same: **PERFECTION**.

Beyond the realm of technology, you'll find me volunteering my time with seniors (), learning from their life experiences and stories. I'm also passionate about career mentoring(), guiding them to navigate the exciting and ever-changing landscape of Canadian workforce().

#QAPro #BiomedEngineer #CareerMentor

Experience

Online Business Systems

Consultant

November 2022 - Present (3 years 2 months)

Calgary, Alberta, Canada

- Designed and executed comprehensive test strategies, plans, and frameworks to ensure compliance with regulatory standards across web-based, healthcare, and client-serving applications.
- Led UAT sessions with diverse stakeholders, including healthcare professionals, legal clients, and technical teams, ensuring system usability, providing training, and addressing feedback to validate critical functionalities and user needs.
- Liaised with vendors, developers, clinical experts, and cross-functional teams to resolve defects, align system updates with downstream workflows.
- Conducted rigorous testing in staging, production, and UAT environments to identify bugs, validate software specifications, and ensure stable updates.
- Maintained detailed records of test cases, results, and defects; prioritized and escalated high-severity issues to developers; and delivered clear, consistent progress reports to stakeholders to drive data-driven decision-making.

Circle Cardiovascular Imaging

4 years 7 months

Senior Quality Assurance Analyst

March 2022 - November 2022 (9 months)

Calgary, Alberta, Canada

- Conducted continuous improvement of QA processes for ML algorithms by conducting in-depth analysis of development workflows, leveraging data driven insights to reduce defect leakage by 25%.
- Designed and implemented comprehensive test strategies aligned with Agile methodologies, streamlining test execution efficiency by 30% through modular test case design and risk-based prioritization.
- Triaged and prioritized defect backlogs, reducing mean time to resolution (MTTR) by 20% through real-time monitoring tools (Jira, Kanban).
- Engineered a test automation framework using Python/Squish, automating 80% of regression suites and cutting manual testing efforts by 40hr/ cycle.
- Led Root Cause Analysis (RCA) for critical field incidents, collaborating with DevOps and engineering teams to resolve 95% of high-priority issues.

R&D QA Software Analyst

May 2018 - March 2022 (3 years 11 months)

800 5th Ave SW

- Established, maintained, and audited comprehensive documentation for testing activities, algorithms, and validation processes, including test protocols, defect reports, and traceability matrices.

- Designed, updated, and executed manual and automated test cases for GUI, API, and algorithm performance, leveraging tools such as Selenium, Python, or proprietary testing frameworks.
- Developed data validation frameworks to assess algorithm accuracy, statistical robustness, and clinical relevance, collaborating with data scientists to refine machine learning models.
- Worked closely with product managers to translate user stories and clinical requirements into testable acceptance criteria and mentored junior QA.
- Worked closely with product managers to translate user stories and clinical requirements into testable acceptance criteria (AC).

University of Calgary

Research Assistant

September 2014 - May 2018 (3 years 9 months)

Hotchkiss Brain Institute, University of Calgary

- Pioneered Image Processing methodologies for the comparative analysis of histological images and MR images, contributing to research outcomes.
- Led team activities, including lab meetings, journal clubs, and research presentations, fostering a collaborative and knowledge-sharing environment.
- Undertook comprehensive research assignments, maintaining consistent communication with the Principal Investigator (PI) to ensure project alignment.
- Authored research manuscripts, grant proposals, and conference papers derived from research findings, enhancing the visibility of our work within the scientific community.
- Evaluated structural imaging methodologies using histological datasets, driving improvements and informed decision-making.
- Collaborated seamlessly with the Animal Resource Centre, Human Experimental Imaging Centre, and other research teams, ensuring the smooth progression of experiments and data sharing.
- Demonstrated expertise in the pre-surgical care, surgical procedures, and histological extraction of laboratory animals, maintaining ethical standards throughout.
- Conducted meticulous histological staining, digitization, and analysis to prepare high-quality imaging materials for research purposes, ensuring accuracy and reliability.

Medtronic Nepal Pvt Ltd

1 year 6 months

Engineering Department Manager

June 2013 - April 2014 (11 months)

Bijulibazaar, Kathmandu, Nepal

- Monitored, and meticulously evaluated all activities and operations within the Engineering department, ensuring rigorous adherence to timelines and performance standards.
- Devised and oversaw the precise planning, execution, and maintenance of cutting-edge medical equipment, encompassing installation, testing, and repair with timely service updates.
- Inspired and motivated our talented workforce while offering steadfast backup support as needed.
- Proficiently communicated crucial updates and information between manufacturing companies, company management, and the engineering department, fostering a culture of continuous improvement.
- Stepped into ad-hoc projects to ensure streamlined operations, guaranteeing that no tasks lagged behind and departmental goals were met.
- Generated comprehensive briefing materials and succinct summaries highlighting the remarkable performance, operational excellence, and achievements of the BME Department.

Application Engineer

November 2012 - May 2013 (7 months)

Kathmandu, Nepal

- Imparted essential skills to medical practitioners for the proficient operation of our latest medical devices, encompassing USG, X-Ray, CT-Scan, Patient Monitor, ECG, and more.
- Conducted comprehensive orientation sessions for new team members, equipping them with the foundational knowledge needed to effectively utilize and apply our devices in their respective roles.
- Orchestrated ongoing training initiatives, ensuring that our team members remained updated on the latest advancements in our medical equipment. This knowledge transition strategy fostered innovation and excellence within our organization.
- Offered hands-on support to medical professionals during their initial interactions with our advanced features, guaranteeing their comfort and confidence in utilizing the latest device capabilities for patient care.
- Maintained seamless communication channels between manufacturing companies, organizational leadership, and site locations, facilitating the timely dissemination of vital software and hardware updates, thus ensuring optimal device performance.

Global Meditech International Pvt Ltd

Sales and Service Engineer

December 2010 - April 2014 (3 years 5 months)

Kathmandu, Nepal

- Effectively addressed maintenance and service requirements for the medical equipment (X-Ray, USG, Patient Monitor, ECG) we supplied to private and government healthcare facilities.
- Implemented streamlined processes to ensure immediate reporting to site locations, management, and manufacturers. This facilitated seamless communication of service requests and reviews.
- Diligently documented updates received from manufacturers and disseminated critical information to site locations, aligning with their specific requirements. This commitment ensured transparency and adherence to industry standards.
- Acted as a professional liaison between site locations and regional service management, facilitating seamless communication of service requests and reviews.
- Played a pivotal role in achieving a remarkable 5% increase in sales performance compared to the previous year, achieved through effective collaboration with the sales team.

Education

University of Calgary

Master's Degree, Biomedical Engineering · (2014 - May 2017)

College of Biomedical Engineering and Applied Sciences

Bachelors of Biomedical Engineering, Biomedical Engineering · (September 2006 - May 2011)