Curriculum Vitae

Sivabalan Ganisen

No. 289, Lorong Cendawan 3/8,
Taman Bayam 2,
09600, Lunas, Kedah
Date of Birth: 19.06.1968
Telephone: 0124908238
Email: sgbalan@gamail.com
Marital Status: Single
Nationality: Malaysian

Mechanical Design Engineer

R&D ~ PROJECT MANAGEMENT ~ QUALITY ASSURANCE

EDUCATION

2002	Certificate in Quality Engineering, **Institute Federation of Manufacturing Malaysia**, Selangor, Malaysia
1995	Certificate in Robotic and Automation Engineering, **FRIS Institute**, Penang, Malaysia
1991	Diploma in Electronic Engineering, **TAFE College**, TAFE Western Australia, Australia

PROFILE OF QUALIFICATIONS

Possess a seasoned background in high-tech hard disk drive (HDD) manufacturing operations with specialization in hardware design, failure analysis and validation, project/team leadership, HDD component qualification planning, statistical analysis, SPC, First Article audits, and internal ISO 9001:2008 audits. Excel in full-scope product lifecycle management, software integration, staff training, and fostering a cooperative climate across multiple departments. Exceptional skills in data trend analysis, root cause analysis, and process validation.

Selected Accomplishments:

- Instrumental in development and execution of Western Digital Corporation's first dual stage actuator (DSA) on 3.5" HDD, successfully deploying program at Asia factory in Sept. 2009
- Submitted US Patent application for Test Ramp for Testing Micro actuators used in Multi-Head Disk Drive
- Project-managed $400K USD initiative for new acoustic semi-anechoic chamber equipment set-up
- Leveraged poke-yoke process to significantly improve acoustic measurement methodology
- Functioned as Mechanical Lead for technology transfer of first enterprise drive (2003) and 1 inch drive (2005) from San Jose, California to factory in Malaysia
- Effectively combined multiple data sources into one SQL database to streamline and expedite reporting

Dyson Sdn. Bhd. Senai, Johor, Johor Bahru (October 2014 – Present)

Test Engineer
Motor Reliability **(2014 – Present)**

- Conduct Measurement of electrical parameters and test setup/monitoring. Implement, document and continuously improve product; process qualification programs using approved reliability test methods at company reliability test lab
- Design and develop test system and text fixtures to facilitate new products testing
- Generate reports test result and input finding problems and issue into problem list
- Monitors and updates reports as needed including report closure
- To monitor control plan and maintenance of test jigs, tools, equipment to ensure that they are in calibration and are in good condition at all times
- Responsibilities include documentation of plans, procedures, test readiness reviews, work instructions and test reports, as well as improving the verification and validation process itself
- Drive for corrective actions to address product quality problem with internal groups
- Excellent problem-solving skills with a strong technical background and good interpersonal skills

Western Digital Corporation, San Jose, California, 2008 to 2013
Mechanical Design Engineer
Acoustic and Fluid Dynamic Motor Department (2012 to 2013)

- Closely partner with product engineers and process engineers to develop best-in-class hard drives for desktop and enterprise products with a constant focus on achieving optimal acoustic performance
- Identify noise emission and vibration root cause according to international standard ISO 7779, ISO 3744, and ISO 3745
- Drive acoustic firmware optimization of HDD in multiple development phases to ensure performance aligns with expectations
- Perform hands-on testing using Artermis software to achieve top-quality performance

Operation and Non-Operating Vibration Department (2011 to 2012)
- Conducted root cause of hard drive excitation in laptop compartment within newly-established department
- Formulated standard noise excitation test tools using Audio City open source software
- Scrutinized laptops' architectural designs and performed engineering studies to identify potential vibration for laptop and desktop OEM customers

Track Mis-Registration (TMR) and Suspension Integration Department (2008 to 2011)
- Executed laboratory test on piezoelectric transducer (PZT) and broad-scope mechanical/electrical tests on new suspension design with suppliers, product designers, process development team, and Asia manufacturing team
- Performed lab measurement and modal analysis via HP35670A Dynamic Signal Analyzer, Ploytec LDV and high speed camera
- Formulated automated acceleration life test (ALT) testing methods on new design suspension
- Conducted design verification of prototype parts and assemblies, performance testing of drive mechanics, and data analysis of test results including statistical regression, trend and distribution analysis
- Applied dynamic leadership expertise toward directing and supervising staff in performing mechanical and reliability tests on dual stage actuator

Western Digital Corporation, Selangor, Malaysia, 2000 to 2008
R&D Associate Engineer
- Demonstrated exceptional talents throughout HDD manufacturing process encompassing clean room, backend test, production data mining, root cause failure analysis, yield improvement, performance characterization and supplier audits
- Delivered extensive engineering support for acoustic testing, assisted in setting up new acoustic server, and contributed to development of acoustic website with drill-down to disk drive component level for precise monitoring of noise emission root causes
- Prepared acoustic procedure and training material, and trained technicians in proper equipment operation
- Used SQL and Excel to generate weekly, monthly, quarterly, and yearly acoustic reports base on disk drive components to facilitate trend analysis
- Implemented and established root cause of failures upon completion of design of experiments (DOE)
- Leveraged statistical data analysis, t-test, normal distribution analysis, and monitoring of Cpk and SPC to regulate assembly issues
- Configured server using Linux operating system for storing multiple disk drive testing data, vital to enabling trend analysis in Minitab
- Participated in quarterly HDD component supplier audit with supplier quality engineering team
- Actively served on internal ISO 9001:2008 audit teams to ensure QMS adhered to strict requirements

Seagate Industries, Penang, Malaysia, 1992 to 1998
Calibration Technical Specialist
- Effectively calibrated computerized precise measurement equipment for slider manufacturing, exhibiting outstanding abilities in equipment set up and troubleshooting, GR&R (Gauge Repeatability and Reproducibility), SPC monitoring, and spare part budgeting
- Directed, supervised, coached, mentored and managed group of 10 technicians in troubleshooting and improving equipment downtime
- Assembled technical training guides for new equipment set-up and defined calibration methodology for Seagate Penang and Seagate Ipoh manufacturing plants in Malaysia
- As key member of yield improvement team, identified and resolved root cause of equipment failure to minimize or eliminate impact to production continuity

SUMMARY

Highly analytical, performance driven engineering professional with 21 years of experience in high-tech hard drive (HDD) manufacturing environment, experienced in creating innovative HDD components with cost effective designs, equipment installation and setup metrology and acoustic lab. A team player with effective communication skills, presentation skills, R&D strength design, failure analysis and validation, project management and HDD component qualification planning, statistics analysis, SPC, first article audits, Internal ISO 9001:2008 audits

CORE COMPETENCIES

Product lifecycle Management	Design Experimental Activities	Hardware Design
Engineering Change Order	Training and Mentoring	Software Integration
Project Management	Process Validation	Root cause Analysis

CAREER OBJECTIVE

Looking for a challenging technical career in which I can contribute my expertise and skills to make an influence and impact in company's success through collaborative and team effort.

COMPUTER SKILLS

Solid Works; MATLAB; Microsoft office application; MS DOS, Windows OS, Linux Fedora OS, SolidWorks, Artermis, Business Objects; Visual Basic;