CURRICULUM VITAE

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NETHAJIPURM,

NELIGONAMPALAYAM (PO),

COIMBATORE - 641 033

CAREER OBJECTIVE :

To utilize my analytical skills and basic knowledge to meet the requirements of the company as a team and keep abreast with newer technologies.

EXPERIENCE DETAILS:

Total year of Experience : 24 years of experience in Design and Development.

Software knowledge : Solidworks2021, Solid edge ST7, Proe 4

S.No	*COMPANY NAME*	*WORKED DURATION*	*YEAR OF WORKED EXPERIENCE*
1	SIMTA MACHINERY PVT. LTD	April 2022 to Till Date	2.5 Year
2	SEASANA INDUSTRIES	Jun 2020 to Mar 2022	1.75 Year
3	SAVIO INDIA PVT. LTD.	Jan 2017 to Jun 2020	3.5 Years
4	LAKSHMI MACHINE WORKS LIMITED	Apr 2015 to Dec 2016	1.75 Years
5	VEEJAY LAKSHMI ENGINEERING WORKS LTD	Feb 2008 to Mar 2015	7 Years
6	SIEGER SPINTECH EQUIPMENTS PVT. LTD.,	Jan 2007 to Dec 2007	1 Year
7	JANATICS INDIA PVT. LTD,	Sep 2000 to Dec 2006	6 Years

April 2022 to Till Date

Name of the Organisation : **M/s. SIMTA MACHINERY Pvt Ltd, SULUR, Coimbatore.**

Designation : **ASST.MANAGER – R & D**

SIMTA is an integrated group of Textile Engineering Companies, consisting of Tapes Manufacturing, Over Head Travelling Cleaners, Bobbin Transport System, Clearer Rollers, Sheet-Metal Engineering and Industrial Fabrics Divisions located at spread-out geographies. Technical collaboration with the undisputed world leader in Overhead Travelling Cleaner Technology of M/S. C-PORT JACOBI, Gmbh, Germany. Astrix uPVC profiles are made as per the Indian market needs with the world renowned brand machines (Battenfeld Cincinnati Extrusion Plant from Austria).

RESPONSIBLITIES:

- New Upvc machine design to develop for Upvc profile Cutting, Welding, Locking and water drain hole machines.
- New concept to develop of all 10 type machines to match profile Cut, Weld to assly requirements.
- Product to make customized specification to meet Upvc profile.
- All BOM and Supplier find to develop some of specified samples requirements.
- All trials to made and finalized to all requirements to meet with asthetics.
- Final catalogue and Customer required videos to meet satisfaction of market requirements.

ACHIEVEMENTS:

- Upvc welding machine welding fusion problem faced then proper linear guide and locating of heating plates position done properly then everything happen welding as per customer requirements.
- New cutting machine belt drive mechanism has been designed and developed from direct drive to Bearing housing PDN linked drive are satisfied then cutting and Length measurement with accuracy & precisions and vibration free cutting motor speed happened during trial then satisfied.
- CNC corner cleaning machine vertical and horizontal movement precis zed and cost effective servo motor & Drive with PLC programmed calculation done for precise cleaning of Welding burrs and smart profile selection programme drawing done for programming.
- End mill machine cost effective compact machine designed and developed for machine cost reduction.

Jun 2020 to March 2022

Name of the Organisation : **M/s. SEASANA INDUSTRIES Pvt Ltd,**
Keeranatham, Coimbatore.

Designation : **SENIOR DESIGNER – R & D**

Seasana was established in the year 2010 in Coimbatore. The company delivering world top rice sorting machine and colour sorting machine products and services. Further committed and developing truck loading conveyor products focusing on our customers achieved satisfaction of superior quality.

RESPONSIBLITIES:

- New conveyor design to customer requirement of various models using solidworks -3D software.
- Designed parts are all to be develop as parts with proper supplier quote and price
- Before tentative product cost to be workout with prepared BOM of material
- Trails to be conducted with required specification and capacity then rectify all problems upto final product satisfy.
- Product specification can be modified to customer requirements
- Final product catalogue prepared with all product details and specification.

ACHIEVEMENTS:

- First of the truck loading conveyor designed and developed for to lift material automatic from ground to truck with superior grip belt / Hydraulic cylinder used for the load lifting capability requirements. Final conveyor runs 2HP motor with Gear box, Speed 15 mtr/min, 63 Dia Hydraulic Cylinder both side used for lifting conveyor desired height of 8.5 feet then 350kg loaded for the belt working and all purposes satisfied. It will reduce man power requirement and time saving.
- Flexible Screw conveyor has been designed and developed as per customer requirement from ground coconut grain/rice husk waste to lift truck level. This conveyor motor with driven pulley and parallel connected shaft spring lift the material from bottom to top of truck.
- Conveyor components are developed in house and outside by me and assembled then trialed.
- All other Dockless truck loading conveyor, flexible conveyor, Horizontal conveyor, Mobile conveyor and cleated conveyor concept model designed and catalogue prepared for making order at customer.
- New stone Sorting sorting machine has been design completed and development work follow up and trial completed.

Jan 2017 to Jun 2020

Name of the Organisation : **M/s. SAVIO INDIA Pvt Ltd, Thamaraikulam, Coimbatore.**

Designation : **SENIOR ENGINEER – R & D**

Savio now operates worldwide in the production and marketing of automatic winders, two-for-one twisters, and rotor spinning frames with manufacturing plants in Italy, China and India. This evolution was accomplished in time by taking as a point of reference the research and development, a strong orientation to the maximum production flexibility and to maintain high quality standards.

Savio has completed 100 years by 2011. SAVIO India Ltd was set up with an intention of providing the world class SAVIO products, specific to India's textile market.

RESPONSIBILITIES:

- New Concept development and technical advanced solutions with new ideas based on marketing inputs and implement in TFO machine / Auto coner machine.
- Design and development of models and drawings are released, by using Solidedge software in 3D and test/trail then Implement of new development in TFO machine and Auto Cone Winder.
- Customer complaint studied and problem solving in all aspects of mechanism, advanced solutions, aesthetic for the required functional parameters.

ACHIEVEMENTS:

- Spindle structure modification from the existing spindle ‘A’ type for the cost reduction and Modified spindle plate (Press tool item) and aluminium casting support new design and aluminium oxide ceramic shape for the new mould then eliminated few parts in the modification. Further in the same modification done another type of machine spindle AR also for the cost reduction purpose.

  Finally it is implemented in regular machine and trial conducted at M/s Nahar textile, Punjab.
- The company has been operating as a ISO 9001 certified and I am also an internal auditor of ISO and department ISO documents controller as per ISO system for audit.
- Machine spindle are driving with tangential belt with pulley and controls of head stock motor. The complaint machines consuming more power with comparing competitor. The belt material has been changed polyamide to polyester belt and trials have conducted at M/s Indian acrylics, Punjab and MR weaving textiles, Rajasthan. The belt co efficient of friction

and belt length calculated during trials and power study done with power meter and belt has been approved based on trial result.

- Machine cradle mechanism modified with automatic lifting arrangement from manual for the cosmos machine. Normally cradle doesn't lift during yarn cut of yarn winding cosmos machines and manually only can do the cradle lifting but it can affect the yarn quality in the yarn package. One sensor putted in the yarn feeler side and if the yarn cuts happens, the feeler fall down then sensor sensing the feeler. The sensor sending signal to the PCB and PCB sending signal to the pneumatic valve then the valve operates and allowed air through to the cylinder and cylinder lifts the cradle arrangement with yarn package. These cycles automatically done repeat by the above mechanism during yarn cut of machine run.

  Finally it is working in one machine outside mill for the observation purpose.
- The cradle lifting and breaking cylinder assembly has been modified in the existing Espero machine as a retrofit to avoiding the old clutch mechanism and very difficult servicing cradle arrangement. An output package yarn quality verified in the yarn lab then implemented in retrofit required machines for the required spares dept.

- Low cost solution of pneumatic pipe line retrofit requirement to the spares dept. Plastic pipe lines are very cost and in long period of time getting expansion then leaks during continuous usage. So pipes welded with pneumatic connection fitting for the replacement of existing leak pipes at mills as retrofit.
- Auto cone winders operations are controlled by its head stock Computer and the computer are owned in setting like counts, winding length, diagnoses problem, parameter and can be modify any of operator at mills. So computer protection doors are designed for all type of machines. The protection doors can be locked by lock and key then required persons only open the lock and setting should be modified.
- Machine has been wind as twisted yarn with the input of cheese yarn packages. The packages to move the required machine area and trolleys are made by the movement of cheese package for the input of TFO machines. So cheese package feeding trolleys has been designed for the requirement of cheese diameter and capacity with low cost solution.
- Auto cone winder waste collecting and controlled by Overhead cleaners (OHTC). The OHTC waste must be dropped in head end side by oscillator and collect the waste then

separate that into good and dusted waste. The waste collection trolleys are designed for collecting the waste good waste and hard waste separately.

Apr 2015 to Dec 2016

Name of the Organisation : **M/s. LAKSHMI MACHINE WORKS LIMITED**
Periyanaickenpalayam, Coimbatore.

Designation : **ENGINEER – DESIGN**

Lakshmi Machine Works Limited(LMW) is India's largest textile machinery and CNC machine tool manufacturers, based in Coimbatore city with technical collaboration with **Swiss based manufacturer Rieter.** LMW has 60% market share in the domestic textile spinning machinery. The only Company in Asia outside Europe to manufacture OE products for Mikron of Switzerland. LMW has ISO 140001: 2004 & OHSAS, 180001:2007 certified.

RESPONSIBILITIES:

- Implement of new development and trails in Auto Cone Winder at pilot mill of LMW by using **IDEAS** software.
- Jig and Fixer concept design for new developing components of Auto Cone Winder machine.
- New Concept development study with competitor machine and implement in Auto coner machine.
- Customer complaint studied and problem solving in all aspects of mechanism, advanced solutions, aesthetic for the required functional parameters.
- Guidance of all type of die casting and manufacturing technical support to **Supply Chain Management(SCM).**

ACHIEVEMENTS:

- New fixer design for eraction of machine.
- New filter design of suction box micro dust filteration at Head stock
- Fluff entry protection in cam box assembly, drumbox assembly, peg and magazine support assembly.
- New concept of package tray for doffing the package during doffing cycle.
- Doffer complaints study and find solutions in machine.

Feb 2008 to Mar 2015

Name of the Organisation : **M/s. VEEJAY LAKSHMI ENGINEERING WORKS LIMITED**
Sengalipalayam, Coimbatore.

Designation : **Sr. ENGINEER – DESIGN**

Over thirty years of proven success in textile machinery manufacturing and Collaborated with the **Savio** European Company**. Veejay Lakshmi** is also the only manufacturer of **Automatic Cone Winder (ACW)** in India. Veejay Lakshmi is the largest manufacturer of Two-for-one Twister (TFO) in India with more than 4500 installations worldwide. Apart from the Engineering Division, cotton yarn through Veejay Lakshmi Textiles , to Egypt, Mauritius, Belgium, Italy and Far East countries like Indonesia, Hong Kong, Singapore, Korea, etc. Veejay has now introduced energy efficient high speed Random Assembly Winder.

RESPONSIBILITIES:

- Design of piston driven **magazine system** of new 18can automatic cone winder machine. The new machine concept has been developed with our Germany consultant.
- New development of 9can machine instead of 6can machine for cost cutting and without maintenance free and assembly flexibility.
- Creating new developments of exist automatic cone winder machine and retro fit the developed projects of exist automatic cone winder.
- The adoption will be as per the competitor machine feature and technology.
- The exist auto cone winder machine has been improved for the customer related complaints.
- The concepts and developed models are working in **pro-e wildfire 4** and studied as per requirements with mechanism. The developed drawings are trials will be taken after the process.
- Trailed and functionally approved drawings will be changed into casting or moulding process as per the requirement and other drawings issued to the manufacturing process for bulk production. Company have all type of machines with advanced tool room facilities.

ACHIEVEMENTS

- In the new machine design, 18can capacity bobbin magazine has been changed instead of 6can bobbin feeding magazine system. I have designed for the alternative bobbin feeding system by using pneumatic cylinder drive mechanism and signalled by yarn sensor. It works through pawl and ratchet assembly with required gear ratio.
- The existing drum has been driven by pulleys with AC motor. The system has been changed to direct coupling drum with BLDC motor for increasing stability and high speed to productivity.

AUTO CONE WINDER MACHINE IMPROVEMENT AND RETROFIT:

- The ACW machine fulcrum is worked as an independent counter weight cylinder and clutch mechanism for brake hold by using pneumatic operation. I have developed the new fulcrum with ***lift and brake cylinder*** inbuilt counter weight of the package holder arm.
- It also modified to eliminate lot of mechanical components of modulation system. The cylinder has lifting the package and holds the package holder arm for removing the conduct between the drum and package during the yarn brake. The ***mould and casting drawing's die developed in China*** and R & D trials are conducted then given to bulk pilot batch production.
- ***Disc braking systems*** has been developed for frequent gasket failure and wear complaint. When the yarn cut, the existing braking system brakes with friction between cone and gasket by pneumatic air. I have developed new system that works face sealing between cone adaptors and braking system by using pneumatic air. During the yarn winding the internal module of brake adaptor connected with the package. This system doesn't connect with the main braking system while running. It also works well without radial sealing braking gasket failure and incorporates into the machine after trials.
- The ACW machine has been working continuous suction for yarn holding purpose. The new adopt ***economizer nozzle*** design has been changed into without suction (vacuum pressure) waste by using change period of the require bobbin. This system has been working as per peg rotating cam. So the suction motor is work on and off with inverter, the motor power reduced efficiently. The system has successfully implemented into ACW machine.

Jan. 2007 to Dec 2007

Name of the Organisation : **M/s. SIEGER SPINTECH EQUIPMENTS PVT. LTD., Coimbatore.**

Designation : ENGINEER – DESIGN

SIEGER SPINTECH is collaborated with **AKE, Welkar, Germany.** This organisation is leading manufacturer of final process equipments for textile industry and supplying and servicing the textile machineries worldwide. Yarn Condition Plant, Cotton Contaminations System, Roving End Opener, Roving Transportation System, Rove Master, Auto-Drafting are some of the major machineries manufacturing in the organisation.

RESPONSIBILITIES:

- Design and Development of Yarn Condition Plant as per customer requirement.
- New Concept design and development of Pre heating system in the yarn Condition plant.
- New Concept design for Jacket Machine in the yarn conditioning plant.
- Responsible for product performance in the customer end.

In the above designing involves Sheet metal works, manufacturing and fabrication works.

ACHIEVEMENTS

- Pre heating system is completed and the performance is satisfied the customer's requirement.
- Wool heat Yarn Condition Plant has designed successfully and working at customer end.
- The cost of Yarn Condition Plant is reduced to 10%.

Sep 2000 to Dec. 2006 (6 Years 4 Months)

Name of the Organisation : **M/s. JANATICS INDIA PVT. LTD**, Coimbatore.

Designation : ENGINEER – PRODUCT DEVELOPMENT

JANATICS is the leading manufacturer of pneumatic products such as Air Cylinders, FRL units, Pneumatic Valves, One touch fittings etc…

RESPONSIBILITIES

Development of new products, it includes

- Drawing analysis to achieve the product specification.
- Creating 3D model & detailing of components using **Pro E 3** and **Auto CAD**.
- Designing hand tools for Plastics and rubber moulds like **Poly-amides, Polyacetal, Polypropylene, HDPE, LDPE, Polyurethane and Nitrile.**
- Machining process set-up and Reverse engineering.
- Fixing testing methods and its parameters.
- Realize the problem and finding the solutions
- Formulating quality standards.
- Continuous improvement with our products feedback from our production department.
- Responsible for product performance in the customer end.

ACHIEVEMENTS

- I have developed products such as Flow control valve, quick exhaust valve, one inch regulator & Lubricator, and air gun.
- Solve the Lubricator oil pump flow control as per the customer requirement (Flow drop changed as 5 drops per sec.) by using the method of surface tension.
- Increased the air gun operating force as per the customer requirement.
- Sort-out the problem in Pilot operated Non Return Valve by which the stem has broken in customer end.

QUALIFICATION:

COURSE	*INSTITUTION*	*YEAR OF PASSING*	*PERCENTAGE %*
DIPLOMA IN MECHANICAL AND RURAL ENGINEERING	**Sri Ramakrishna Mission Vidyalaya, Coimbatore.**	**1997-2000**	**86%**
HSC	**Govt. Higher secondary School, Coimbatore.**	**1996-1997**	**75%**
SSLC	**Govt. Higher secondary School, Coimbatore.**	**1994-1995**	**84%**

COMPUTER SKILLS:

For 2D drafting	:	AutoCAD
For 3D drafting	:	Solid edge,Pro e 4, IDEAS & Solidworks
Operating system	:	Windows XP, 2007 and Vista
Document preparation	:	MS Office, Open office and king soft.

PERSONAL DETAILS:

Father's Name	:	ARUMUGAM. A
Mobile No.	:	9894991038
Date of Birth	:	30.04.1980
Marital Status	:	Married
Languages known	:	English, Tamil and Kannada.

DECLARATION

I assure you that if my selection considered with your efficiency, I would attend my task diligently and consequently. I will be a sincere and diligent candidate. I will abide with your company terms and conditions.

Thanking you

Place: Coimbatore
Date:

(A. GUNASEKARAN)