Bhoopal Ponnuvelu

Career Portfolio

Date: 27/05/2020

Hong Kong

Career Path 2004 to 2020

Year	Employer	Industry	Designation & Job role
2004 to 2006	Automatic devices, Chennai	Industrial Automation	 Engineering Trainee, Design and Development of Special Purpose Machines. Production Fixtures. Automation Fixtures. Poke Yoke etc
2006 to 2012	Foxconn, FIH NLV, Shenzhen	Mobile Communication devices	Chief EngineerDesign and Development of Nokia mobile Phones
2012 to 2018	Johnson Electric, Hong Kong	Consumer electrical devices	Engineering SpecialistDesign and Development of BLDC Motors.
2018 to Present	Astec, Consumer HK Hold Co II, LTD	Consumer Power Electronics	 Lead Engineer Design and Development of DC power adaptors.

Career Skills / Specialization

Skills	Description
1	Product design & development, R&D & NPI
2	Cost Estimation & Cost Reduction
3	Product & Process validation
4	Process Design ,Co ordination and implementation
5	Product Benchmarking
6	Productizing
7	Product Proto sample development
8	DOE(Design of Experiments)
9	Test fixture design and development
10	Failure Analysis & RCCA
11	Tolerance Analysis
12	QFD
13	DFMEA
14	Vendor Development & Qualification
15	Employee Skill Development

Skills	Description	Proficiency Level
1	Solid Works	Good
2	CREO-4	Good
3	Catia-V5	Good
4	ANSYS	Average
5	JMP	Average
7	Microsoft Application	Good

Present Employer	ASTEC ,Consumer HK Hold CO II, Hong Kong
Duration	June 2018 to present
Enrolled Department	Product Design Engineering, R & D
Designation	Lead Engineer, Mechanical
Responsibilities	Design and Development BLDC motors

Project Details: ASTEC ,Consumer HK Hold CO II, Hong Kong		
18W Power Adaptor, with USB-C connector.		
Job Role	Design Support at NPI Factory. Design Evaluation, Product & Process validation, Line qualification, Vendor qualification, Cost reduction, Failure analysis & RCCA	
Achievements	 Successfully reduced the product cost by 5 US\$ as follows. By replacing the second source components without sacrificing the product quality. Reduced the head counts on the production line by fine tuning the existing design which reduces the process cost Replace the expensive glues with the lower cost one with out sacrificing the product quality. Proposed the changes on the existing design which could reduce the product cost further, but this proposal is abandoned for official reasons 	

Project Details: ASTEC ,Consumer HK Hold CO II, Hong Kong		
65W , DC Power Adaptor with USB-C connector	Product Under Development	
Job Role	Mechanical Design & Validation, Process Development & Validation. DOE, Failure analysis & RCCA	
Achievements	Individually handled the following product development task due to the resource limitation during this Covid-19 pandemic situation. Mechanical Design. Assembly & Process design Design & Process Validation Project Documentation Failure Analysis & RCCA. Remote accessing the NPI factory DOE. Thermal testing and evaluation Cost reduction Remote accessing the vendors and part qualifications	

Previous Employer I	Johnson Electric ,Hong Kong
Duration	June 2012 to June 2018
Enrolled Department	Product Design Engineering
Designation	Engineering Specialist
Responsibilities	Design and Development of BLDC Motors(Due to copy right issues Motor 3D is not included)

Developed the BLDC motor platform for the following products

Dyson
Ventilation
&
Floor Care



80W, 4000 RPM Motor



100W, 3400 RPM Motor



50W, 15000 RPM Motor

STIHL Range Wood



1.5KW, 12000 RPM Motor



900W, 12000 RPM Motor



3KW, 12000 RPM Motor

Honda & STIHL lawn & Garden Products





Starter motor solution for the Lawn Mowers

Achievements at Johnson Electric

- 1. Won the chairman award for the two successive year 2014 & 2015.
- 2014 Outer Rotor Over mold design
- 2015 Sensor less driving mode for the power tools by adopting the saliency concept
- 2. Won the patent 2015/0302,753 for Outer Rotor Over Mold Die-Casting
- 3. Won the US Patent US10424998B2, Glue less Rotor Design for he BLDC motors





Previous Employer II	Foxconn, FIH- NLV, Shenzhen
Duration	June 2006 to April 2012
Enrolled Department	R&D, Product Design & Development
Designation	Chief Design Engineer
Responsibilities	Design and Development of mechanical enclosures and modules for Nokia mobile phones.

Designed the mechanical enclosures and modules for the below Nokia Models

Nokia	Nokia	Nokia	Nokia	Nokia X2	Nokia Lumia
3110C	3110E	6303C	6303C		



Display frame

Keypad Module

Side Keys

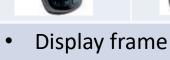
USB Door

Power Keys









- Side Keys
- **Power Keys**
- **USB** Door
- Keypad Module







Display Frame/Chas sis, and shielding

Achievements at Foxconn, FIH-NLV

Won the following patents .

- 1. 8,238,071 ,Elastic sheet structure and the electronic devices employing the same(Over mold & water proof grounding pin)
- 2. 8,467,174, Portable electronic device with fastening structure (Rigid Display Module)
- 3. 8,519,279, Portable electronic device with interface(Over mold & water proof DC Jack)

Kindly refer my linked page through the below URL for more details. www.linkedin.com/in/bhoopal-ponnuvelu-646b3a42

Previous Employer III	Automatic devices, Chennai	
Duration	April 2004 to Sep 2006	
Enrolled Department	Product Design & Development	
Designation	Engineering Trainee & Junior Engineer	
Responsibilities	Design and Development of Special purpose machines, Production Fixtures & Poke Yoke	

Task & Responsibilities

- 1. Design and development of Special purpose machines,
- 2. Design and development of production fixtures and poke yoke.
- 3. 3D model design.
- 4. Tool room process follow-up
- 5. Fixture and Machine Fitting and Assembly
- 6. Subcontract and outsourcing job follow-up
- 7. Product Installation at customer site