# Balaji K

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# **Career Objective**

Seeking a position to utilize my skills in your company that offers professional growth and to continuously acquire skills in emerging trends.

**Experience** 

DESIGN ENGINEER – T	RAINEE (1 Year + 10 Months) From June 2019		
Makeorbuy contracting P			
(Geodesic Techniques P	- The state of the		
Enquiry			
Coco Cola Manufacturing Plant, Hyderabad.	Design of roof (Area = 34000 SQM) in 3 different configurations – (i) Space fram (ii) Truss and (iii) Primary and Secondary Beams as per IS codes.		
GCC Club, Mumbai. (G+7)	Steel design – Beams, Columns and braces as per IS codes.		
Kensri School, Bangalore.	esigned the sports complex floor and roof using Truss and Flat Slab as two different ptions.		
Logitech Aerobridge, Mumbai.	Designed the steel members of the proposed bridge.		
Panchshil, Pune. (G+12)	Design of Steel Beams and CFT Columns.		
M-FAR, Pune. (G+14)	Controlling Modal behaviour and story drifts as per IS codes.		
Projects			
Phoenix – Equinox, Hyderabad. (B2+G+30)	Developed AutoCAD script file to <b>automate</b> the generation of fabrication drawings.  Developed my leadership skill by heading a team of 7 detailers and delivered the fabrication drawings much before the deadline by proper planning and motivation, under pressure.  Carried out checking of fabrication drawings of beams, columns and shear walls.		
Phoenix – 285 T6, Hyderabad. (G+17)	Connection design – Design of shear tab as per IS codes.		
R&D			
Composite Beam Development	Worked as a part of Research and Development team for developing a new economical and low depth composite beam section.  Performed <b>FEM analysis</b> for the proposed composite beam in Staad pro.  Learnt the design of composite beams and the impact of each element in design aspect.  Studied the basis in which moment – load interaction curves are formed in SP-16, as a part of composite beam development.		
Internship			
Chennai Metro Rail Ltd.	Studied the Structural and Architectural drawings of metro stations.  The design and detailing of beams of metro stations are studied.		
Suja Designers	RCC design of Residential building.		

# **Academic Profile**

Addition forms				
COURSE	INSTITUTION	YEAR OF PASSING	PERCENTAGE	
M.E Structural	MEPCO Sclenk Engineering College,	2019	89	
Engineering	Sivakasi.			
B.E. – Civil	Sri Sairam Engineering College,	2017	84.6	
Engineering	Chennai.			
Higher Secondary	S.R.G.D.S. Matriculation Higher	2013	92.9	
	Secondary School, Thiruvannamalai.			
Secondary	S.R.G.D.S. Matriculation Higher	2011	94.2	
	Secondary School, Thiruvannamalai.			

## Accomplishment

- Completed the courses "The comprehensive ETABS professional course (RCC and Steel)" and "Structural Steel design of Pipe racks" in UDEMY.
- Completed the IIT madras certification course on PYTHON.
- Won Best Paper award for paper on "Thermal and acoustic performance evaluation of bricks incorporating sewage treatment plant sludge" in International Conference on Innovations in Engineering, Science and Technology 2019 (ICIEST 2019).

#### Software Skills

- Analysis & Design Etabs and Staad Pro.
- Modelling & Drafting AutoCAD
- ➤ MS Excel
- Cad Script
- ANSYS and Python Basics.

### **Areas of Interest**

- > Structural Analysis.
- Steel Structures Design.
- RC design.

#### **Publications**

- A journal on "Development of brick as a Thermal and acoustic resistant building component" in International Journal of Engineering Research and Applications (IJERA).
- A journal on "Experimental study of removal of Fluoride in water using Bio-Material" in International Research Journal of Engineering and Technology (IRJET)

## **Project Details**

Design of Pedestrian subway using Box Culvert.

Manual Design of pedestrian subway using Moment distribution method.

Experimental study of removal of Fluoride in water using Bio-Material

Studied the side effects of presence of fluoride in drinking water and designed the low-cost fluoride filter by performing pilot studies and experimental studies.

Development of brick as a Thermal and Acoustic resistant building component

Enhanced the thermal and acoustic property of bricks by incorporating waste materials. The thermal behaviour was compared with **ANSYS** analytical results and Acoustic behaviour was compared with **ABAQUS** analytical results.

#### References

Haridoss B,

Design Engineer,

Geodesic techniques pvt. ltd.

Contact No.: 9750423653.

Naveen B,

Design Engineer,

Makeorbuy Contracting pvt. ltd.

Contact No.: 8903043535.

#### Declaration

I hereby declare that the information stated above is true to the best of my knowledge.

DATE: 13.04.2021 PLACE: CHENNAI