# Balaji K

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## Experience

| JUNIOR ENGINEER – DESIGN (2 Years 4 months) | From June 2019 |
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| *Makeorbuy contracting Pvt. Ltd., Bangalore.* | |
| *(Geodesic Techniques Pvt. Ltd. Group)* | |

### Enquiries

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| Panchshil Equiniux Data centre (G+6) | Designed Composite Beams, CFT columns and Braces<br>Designed Base plate and anchor bolts<br>Designed End plate, Shear tab and web splice connection<br>Prepared Floor-wise design report as a part of Work Breakdown Schedule |
| Coco Cola Manufacturing Plant, Hyderabad. | Design of roof (Area = 34000 SQM) in 3 different configurations – (i) Space frame, (ii) Truss and (iii) Primary and Secondary Beams as per IS codes |
| Storage shed, Gambia. | Development of complex truss geometry for purlin free roof<br>Designed the curved roof of area 15000 SQM using truss as per IS 800 |
| RIL PV Manufacturing Shed, Gujarat. | Designed the pitched roof truss of area 17000 SQM as per IS 800 |
| Katerra warehouse, Bidadi. | Designed the pitched roof truss of area 21000 SQM as per IS code |
| L&W Data Centre, Pune. (G+3) | Design of Steel Beams, Columns and braces as per IS codes |
| Panchshil commercial building, Pune. (G+12) | Design of Steel Beams and CFT Columns |
| M-FAR, Pune. (G+14) | Controlling Modal behaviour and story drifts under team lead's guidance |

### Projects

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| Phoenix – 285 T6, Hyderabad. (G+17) | **Role: Acting Team lead**<br>Identified and designed additional beams required for inclusion of walls by the client.<br>Connection design – Design of shear tab as per IS codes |
| Phoenix – Equinox, Hyderabad. (B2+G+30) | **Role: Assistant Engineer**<br>Developed AutoCAD script file to automate the generation of fabrication drawings<br>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<br>Carried out checking of fabrication drawings of beams, columns and shear walls |

### R&D

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| Connection Program Development | Developed a part of back-end python program for automation and optimization of connection design |
| Composite Beam Development | Worked as a part of Research and Development team for developing a new economical and low depth composite beam section<br>Studied the basis in which moment – load interaction curves are formed in SP-16, as a part of composite beam development |
| Precast Slab system | Worked as a part of R&D team in developing precast slab for achieving formwork free floor plate system<br>Learnt the basics of Pre-tensioning, as a part of development |

### Automation – Self Interest

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| Staad - Loading | Automating Staad editor input using excel sheets as per IS codes & staad standards |
| Autocad - Drawings | Developing autocad script file by using excel for automated drawing generation |

### Internship

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| Chennai Metro Rail Ltd. | Studied the Structural and Architectural drawings of metro stations<br>The design and detailing of beams of metro stations are studied |

## Academic Profile

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

## 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
➢ Python - Basics

## Areas of Interest

➢ Steel Structures Design
➢ Automation

## 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)

## Languages

Tamil   Native Proficiency
English  Professional working proficiency
Telugu   Limited Proficiency

## References

➢ Haridoss B,
Design Engineer,
Geodesic techniques pvt. ltd.
Contact No.: 9750423653.

➢ Naveen B,
Design Engineer,
Makeorbuy Contracting pvt. ltd.
(Geodesic Techniques pvt ltd group)
Contact No.: 8903043535.