

CURRICULUM VITAE

S.SHANMUGARAJ

Doctoral Research Scholar

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CAREER OBJECTIVE

A prudent engineer, enthusiastic to enhance my knowledge in various aspects of Automation in construction and to further the cause of research by learning, evolving and innovating in the field of civil engineering.

ACADEMIC PERFORMANCE

Course	Institution	Year	CGPA/ Marks %
PhD	Indian Institute of Technology Madras, Chennai	2020 - Present	-
M.Tech	Indian Institute of Technology Madras, Chennai	2017 - 2019	9.30
B.E	P.S.G. College of Technology, Coimbatore	2011 - 2015	9.09
XII	TNPL MHS School, Karur	2011	95.33%
X	TNPL MHS School, Karur	2009	94.60%

PAST EMPLOYMENT DETAILS

Assistant Manager Civil L&T Constructions, Madhya Pradesh (May 19' to May 20')	<ul style="list-style-type: none">▪ Assistant Planning Manager for 1200 Cr. EPC Project▪ Single point responsibility for Planning, Monitoring and resource Management for all the civil activities which includes the construction of four Pump Houses and four Delivery Chambers.▪ Stakeholders management, Document approvals, and Asset management.
Senior Engineer L&T Constructions, Chennai (June 15' to July 17')	<ul style="list-style-type: none">▪ 2 years' experience as project coordinator for 8 EPC Projects▪ Coordinated the procurement activities, construction planning, monitoring and vendor payments of all eight projects simultaneously.▪ Two months deputation as a site planning engineer at Odisha lift irrigation project

ACADEMIC PROJECTS AND INTERNSHIPS

<p>M Tech. (July 17' to May 19')</p>	<p>Main project - Automation in construction progress monitoring of pipeline laying activity</p> <ul style="list-style-type: none"> Developed a cost-effective, user-friendly framework (application) to monitor the progress of pipeline laying activity using Computer Vision (Artificial Intelligence) on site images taken on a smartphone. <p>Internship - L&T Constructions</p> <ul style="list-style-type: none"> Attended internship as a site execution engineer at Kanpur Water Carrier System project for two months.
<p>B Tech. (July 11' to May 15')</p>	<p>Main Project - Improving the efficiency of Kunniyamuthur canal using geomembranes</p> <ul style="list-style-type: none"> Studied the actual condition of the Kunniyamuthur canal in Coimbatore, India and proposed the advantages of using geomembrane lining reinforcement of the canal instead of completely renovating it. <p>Mini Project - Compressive strength of concrete cylinders wrapped with glass fibre reinforced polymers</p> <ul style="list-style-type: none"> Studied the compressive strengths of normal concrete cylinders and concrete cylinders wrapped with glass fibres. Proved that concrete cylinders wrapped with glass fibres had increased compressive strength and the glass fibre wrapping can be used as a temporary solution for damaged concrete columns. <p>In-Plant Training - TNPL</p> <ul style="list-style-type: none"> Study on the construction of TNPL CBSE school and working of the wastewater treatment plant in the paper manufacturing unit. <p>Industrial Field Training - Coimbatore</p> <ul style="list-style-type: none"> Observation of Reverse Osmosis Plant, Paver Block Manufacturing Unit, RMC plant, Wastewater treatment plant, Railway station working, Brick manufacturing plant.

SKILLS

- Design** - AutoCAD, STAAD Pro
- Coding** - C, C++, VB.NET, VBA, Python, MATLAB
- CPM Tools** - Revit, Dynamo

POSITIONS OF RESPONSIBILITY

<p>Tutoring</p>	<p>Teaching Assistantship - Repair and Rehabilitation of concrete structures</p> <ul style="list-style-type: none"> Coordinator for student's term project, correcting papers and maintaining attendance and mark sheets. <p>Teaching Assistantship - Machine Learning in construction</p> <ul style="list-style-type: none"> Assisted 50+ students in working on their projects, correcting papers and maintaining mark sheets.
<p>Project Head</p>	<p>Leadership Developing GET - L&T Construction</p> <ul style="list-style-type: none"> Managed and mentored two members for 1 year in the areas of planning, procurement and site coordination for L&T construction projects.

CO-CURRICULAR ACTIVITIES

Coordinator/ Volunteer	Conference coordinator - IGLC 2018 at IIT Madras <ul style="list-style-type: none">Worked as a coordinator/volunteer for conducting the International Group of Lean Construction conference held at Chennai in the year 2018.
Workshop	CIT 2013 - Coimbatore <ul style="list-style-type: none">Attended a one-month workshop on 'Construction planning, techniques and management – a new paradigm'.

RESEARCH INTERESTS

- Automation in Construction
- Machine Learning
- Concrete 3D printing

PERSONAL DETAILS

Date of birth : 14.07.1994
Linguistic competencies : English, Tamil
Address (Permanent) : 22, O.K.R.Street,
Velayuthampalayam (P.O),
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REFERENCES

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DECLARATION

I, **S.SHANMUGARAJ**, do hereby confirm that the information given above is true to the best of my knowledge.

[SHANMUGARAJ .S]