

EDUCATION

Vivek Agarwal is a **Civil Engineering graduate** from **IIT Kharagpur**, one of India's premier institutes. Along with his strong engineering foundation, he has continuously advanced his knowledge in emerging technologies, with a special focus on **artificial intelligence** and its **applications in construction**. His academic background, combined with technical expertise, enables him to bridge traditional engineering practices with modern, technology-driven solutions.

WORK EXPERIENCE

Vivek Agarwal's professional journey includes roles at Larsen & Toubro (with training at NICMAR Pune), Airbus India, IIT Delhi, University of Windsor, and Brahmani Developers, covering construction planning, structural analysis, and field-level project execution.

During his training at Larsen & Toubro (2024–2025) in collaboration with NICMAR Pune, Vivek Agarwal gained hands-on experience in construction planning and scheduling using Primavera P6. He worked on project baselines, resource allocation, progress monitoring, and schedule optimization, and presented a project schedule S-curve that was highly appreciated by the Tata Consulting Engineers. This role strengthened his expertise in Primavera P6, Excel, and planning tools, while showcasing his quick learning and problem-solving ability.

As a Simulation and Numerical Modelling Designer at **IIT Delhi** (2022-2023), he contributed to a **journal publication** (DOI: 10.1016/j.cma.2023.116553) by deriving non-linear constitutive relations for Cosserat rods and applying Finite Element Modelling (FEM) to **achieve results 150x faster**, validated through Abaqus simulations.

At **Airbus India Pvt. Ltd.** (Aug-Nov 2023), he worked as an **Structure Damage Analyst**, applying Continuum Damage Mechanics (CDM) and developing fatigue prediction models using FEM in Abaqus.

At the **University of Windsor, Canada** (May-Jul 2023), he served as a Damage Equipment Analyst, at the **Girde Howe Bridge** built from Windsor to Detroit, contributed in reduction of experimental requirements from **140 to just 36**.

At **Brahmani Developers Pvt. Ltd.** (Mar-May 2022), he gained field exposure as a **Construction Field Analyst**, using AutoCAD and Staad PRO for structural analysis, design optimization, and bar bending schedules, while learning the operations of large-scale construction projects.



Appreciation for Your Excellent Contribution

ANKUR CHATTERJEE <ankurc@Intecc.com>
To: Vivek Agarwal <agvivek47@gmail.com>
Cc: MOUMIKA ROY <moumikaroy@Intecc.com>

Mon, 11 Aug at 18:13

Dear Vivek,

I wanted to take a moment to personally appreciate your outstanding contribution during your training period.

Your initiative in studying the project schedule in Primavera P6 and enhancing its impact has been truly commendable. The presentation you prepared on the project schedule S-curve was not only well-structured but also highly appreciated by the client — a testament to your clarity of thought and technical skills.

Your quick learning ability, along with your proficiency in P6, Excel, and other planning tools, reflects your strong potential in the field of construction planning. Keep up the great work and continue building on these strengths.

Wishing you continued success in your professional journey.

Best regards, **Ankur Chatterjee**Planning Manager

TSAT Plant, Jagiroad, Assam

Sensitivity: LNT Construction General Business



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INTERNSHIP EXPERIENCE LETTER

Date: 24th July 2025

To Whom It May Concern,

This is to certify that VIVEK AGARWAL, a student of NICMAR University, Pune, has successfully completed his internship with L&T Construction from 15th May 2025 to 11th July 2025 as a Planning Intern in the Building & Factories IC/ TSAT Plant - Jagiroad.

He was found to be sincere and diligent during the internship tenure. We wish **him** success in all future endeavors.

Sincerely,

for LARSEN & TOUBRO LIMITED

(MOUMIKA ROY)

Youriha Roy

SENIOR HR MANAGER - EAST

BUILDINGS & FACTORIES IC, KOLKATA



Experience Certificate

This is to certify that Vivek Agarwal has successfully completed his Internship at Airbus Group India Pvt. Ltd. with AIRFRAME, and the details of the same are given below:

Full Name

: Vivek Agarwal

Internship with

: AIRFRAME

Internship Start Date : August 16, 2023

Internship End Date : November 30, 2023

Conduct during Internship : Good

Responsibilities

: Airframe Intern

We wish all the very best in the future. Form Airbus Group India Private Limited

Shishir Kumar

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Head of Resource & Develop

Date: December 04, 2023

Place: Bangalore



भारतीय प्रौद्योगिकी संस्थान दिल्ली INDIAN INSTITUTE OF TECHNOLOGY DELHI

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Web.: http://web.iitd.ac.in/~ajeetk

Date: 24/08/2022

To whomsoever it may concern

Mr Vivek Agarwal, an undergraduate student from the Dept. of Civil Engg. at IIT Kharagpur, worked with me as a summer intern for two months during the period 16th May 2022 to 15th July 2022. His task was to develop Cosserat rod-like constitutive relations for elastic strips. This was a daunting task for a UG student. However, Vivek not only derived relevant nonlinear equations, he developed a FEM based numerical scheme for its solution and further successfully wrote the relevant code in MATLAB. The work will lead to an excellent publication. Although Vivek has gone back to his parent institute, he is still in touch with me and preparing the manuscript for publication.

I have guided several summer interns during my 10 years of service as Professor at IIT Delhi. Several undergraduate and Master's students of IIT Delhi have also worked on their thesis with me during this year. I can safely say that the performance of Vivek was simply the best among all the students that I have come across. The volume of work that Vivek completed during two months is equivalent to a typical one year Masters project here at IIT Delhi. I can see a very bright future for him if he continues this way and wish him all the best for his future endeavours.

(Ajeet Kumar)



Certificate of Program Completion

This certifies that

Vivek Agarwal

has successfully completed a Mitacs

Globalink Research Internship

effective on August 5 2023.

Project Title: Galloping cables! Vibrations in

Cable-Stayed Bridges using

Shape Memory Alloys

Host University: University of Windsor -

Windsor

Host Professor: Niel Van Engelen

Mitacs Globalink Research Internship Globalink Research Internships are 12 weeks in duration and interns are required to work 40 hours per week.

Gail Bowkett

Vice-President, Programs

Program Manager Global Research Internship MITACS

Subject: Certificate for project work

Dear Sir/Madam,

This is to certify that Mr. Vivek Agarwal (undergraduate student of Civil Engineering at IIT Kharagpur with roll number 20CE10094) undertook a semester-long group project titled "Innovative use of medical covid waste" as part of my Introduction to Civil Engineering (CE20101) course during the Autumn Semester of 2021-22. The group consisted of 7 members.

The project was conceived, researched and executed by the students of the group. They met several times every week for about 10 weeks to complete the project. The team made about five presentations to me during the semester to discuss their progress. At the end of the semester, the team made a final presentation to the entire class.

I was very impressed by the quality of the work. The team including Mr. Agarwal received the highest grade EX for the project.

Please contact me if you need any further information.

Sincerely,

Baidurya Bhattacharya
Professor
Department of Civil Engineering
Indian Institute of Technology
Kharagpur 721302

Baidurya Bhattacharya Professor of Civil Engineering IIT Kharagpur

Email: baidurya@civil.iitkgp.ac.in



Ref: - BDPL/22-23/0058

Date: - 02.07.2022

To Whom It May Concern

"This is to certified that Mr. Vivek Agarwal, 3rd year UG Student, Civil Engineering, Indian Institute of Technology, Kharagpur has been appointed as Site Intern for construction of Basement and (G+2 floor) Auditorium and convention Centre and (G+2 floor)Tribal Museum, a project of Smart City Rourkela-1. He is given responsibility to coordinate with site in charge in progress planning, Quality of work and prepare BBS for execution of work at site with through study of drawing.

He is found sincere and perfect in all the field he is given responsibility We wish him all the success in his career.

Thanking you,

Yours Faithfully For Brahmani Developers Pvt. Ltd

Brahmani Developers Pvt. Ltd.

Director

