

Irrigation Dept. Govt of Assam	1992	1997	Assitant Engineer
IIT Delhi	1991	1992	Senior Research Assistant,
L&T ECC Construction Group	1990	1990	Supervisor-A
L&T ECC Construction Group	1989	1990	Graduate Engineer Trainee

3. Details of Experience:

Experience	Name of the Organization	Duration	Nature of Work
i) Teaching	Jorhat Engineering College, Jorhat, Assam	24 yrs	Taking classes, projects, consultancy works, university question paper setting and evaluation of answer scripts
ii) Research	(a) IIT, Delhi	2 months	Energy absorption experimental plasticity
	(b) IIT Guwahati	4 years	Numerical modeling
	(c) University of South Carolina, USA	Six months	System identification, Numerical simulation of active control
iii) Industry	Larsen & Toubro, ECC construction group	1 yr	Supervision of construction work

4. PhD guided: Numerical Parametric Study on Vibration Isolation Using Open and In-Filled Trenches, Ankurjyoti Saikia, Tezpur University, 2015

5. Details of technical paper published in SCI indexed Journal

Title of Paper	Name of the Journal in which Published	Date of Publication
Active control of Quincy Bayview Bridge, Illinois, USA against seismic excitation, Part I: Model updating	Structural Control and Health Monitoring, 2008, 15:1057-1077, Wiley Interscience	January, 2008

Design of Active controller for Quincy Bayview Bridge, Illinois, USA against seismic excitation, Part II: Control implementation	Structural Control and Health Monitoring, 2008, 15:1078-1104, Wiley Interscience	January, 2008
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6. BOOK CHAPTER

- (i) Karismita Pathak, Atanu Kumar Dutta(2021), *Role of Openings in Seismic Resistance of Infill Walls: A Critical Review of Indian Codal Provision* Lecture Notes in Civil Engineering, Vol. 175, Sreevalsa Kolathayar and SiauChen Chian (Eds): Recent Advances in Earthquake Engineering , 978-981-16-4616-4, 515427_1_En, (Chapter 35), Springer
- (ii) Sutanuka Nath, Atanu Kumar Dutta(2021), *Influence of soil-structure in elevated water tank*, [Geohazards](#) pp 399-410, Proceedings of IGC, 2018, Springer Online, 2020, Ed: Madhavi Latha Gali P. Raghuv eer Rao https://link.springer.com/chapter/10.1007/978-981-15-6233-4_28
- (iii) Sutanuka N., Dutta, A., *Seismic Analysis of Elevated Water Tank using Spring-Mass Model Influence of soil-structure in elevated water tank*, Book of NCRAS T(2018) in: Kakati, B., Bora, D.(eds) Advances in Science and Technology , Vol 1 p (67-71)
- (iv) Md. Halim, Atanu Kumar Dutta(2019), *Pushover Analysis of R.C.C. Buildings Including 3-D Soil-Structure Interaction*. In: Patel S., Solanki C.H., Reddy K. R., Shukla S. K.(eds) Proceedings of Indian Geotechnical Conference 2019, IGC Vol-IV, Springer. <https://www.springer.com/us/book/9789813365636>
- (v) Banerjee A, Dutta A. K., (2020), *Numerical Model and Dynamic Characteristics Analysis of Cable-Stayed Bridge*. In: Dutta, A., Inan E., Dwivedy S. K. (eds) Advances in Structural Vibration- Select Proceedings of ICOVP 2017, Lecture Notes in Mechanical Engineering, Springer <https://doi.org/10.1007/978-981-15-5862-7>
- (vi) Dutta A.K., Deka D., Hatibaruah A., Goswami D., Rai S.S., Basumatary T. (2018) *Environmental Sustainability: Stabilized Mud Block*. In: Sarma A., Singh V., Bhattacharjya R., Kartha S. (eds) Urban Ecology, Water Quality and Climate Change. Water Science and Technology Library, vol 84. Springer, Cham. https://doi.org/10.1007/978-3-319-74494-0_5

7. International Conference

- (i) Banerjee A, Dutta, A. K.(2017) *Numerical Model and dynamic characteristics analysis of Cable Stayed Bridge*, ICOVP, 13th International Conference on Vibration Problems 29th November – 2nd December, 2017, Indian Institute of Technology Guwahati, INDIA

- (ii) Das C, Dutta, A. K.(2017) *Earthquake Resistance Of Traditional Bamboo Stilt Houses in Comparison To RC Houses* , ICOVP, 13th International Conference on Vibration Problems 29th November – 2nd December, 2017, Indian Institute of Technology Guwahati, INDIA
- (iii) J P Mahanta, A. K Dutta,(2016), *Behaviour Of Building Frames Under Soil Structure Interaction* 6th International Conference on “Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics(6 ICRAGEE)” August 01-06
- (iv) Atanu Kumar Dutta, J M Caicedo, Boris Zarate (2012), *System Identification Of Cable-Stayed Bridge: A Case Study*, International Symposium on Engineering under Uncertainty: Safety Assessment and Management (ISEUSAM-2012) January 4-6, 2012, *Bengal Engineering and Science University, Shibpur, Howrah, WB, India*
- (v) A. K. Dutta, A. Dutta, S. K. Deb (2008), *Design of Active controller for Bill Emerson Memorial Bridge, Missouri, USA against Seismic Excitation using Updated Numerical Model*, 14th World Conference on Earthquake Engineering, Beijing, China, Oct 12-17
- (vi) A. K. Dutta, S. K. Deb, A. Dutta (2006), *Active Control of Cable Stayed Bridge against Seismic Excitation: A case study*, International Congress on Computational Mechanics and Simulation (ICCMS - 06), Indian Institute of Technology, Guwahati, India, December 8-10
- (vii) Caicedo Juan M, Dutta Atanu K., Zarate Boris (2006), *System identification and model updating of the Bill Emerson Memorial Bridge*, 4th World Conference on Structural Control and Monitoring, San Diego, California, USA, 11-13 July
- (viii) Zarate Boris A, Caicedo Juan M, Dutta Atanu (2006), *Model updating of a cable-stayed bridge using MGA*, IMAC-XXV: A Conference & Exposition on Structural Dynamics, Florida, USA, February 19-22

8. National Conference

- (i) Gautam Das, Mousoom Mrinmoy Kashyap, Niranjana Konwar, Atanu Kumar Dutta(2021) *Flood Proof House: An Alternative Approach To Conventional Housing Typology*, VCDRR Proceedings, NITK
- (ii) Karismita Pathak, Atanu Kumar Dutta(2021), *Role of Openings in Seismic Resistance of Infill Walls: A Critical Review of Indian Codal Provision*, VCDRR Proceedings, NITK

- (iii) Md. Halim, Atanu Kumar Dutta(2019), *Pushover Analysis of R.C.C. Buildings Including 3-D Soil-Structure Interaction*. In: Patel S., Solanki C.H., Reddy K. R., Shukla S. K.(eds) Proceedings of Indian Geotechnical Conference 2019
- (iv) Sutanuka N., Dutta, A., *Influence of Soil-structure in Elevated Water Tank*, Proceedings of Indian Geotechnical Conference 2019, IGC, 13-15 Dec 2018
- (v) Chayanika Das, Atanu Kumar Dutta(2017), *Seismic Performance of Stilted Houses of North East India*, Indian Geotechnical Conference, IIT Guwahati, India

9. National Seminar

- (i) Atanu Kumar Dutta(2012), *Rapid Visual Study of Indian RCC building stock: Problems and Prospect*, National Seminar cum Exhibition On “Earthquake Hazards: Education, Preparedness and Management, Organized by Environmental Watch and Management Institute Under the aegis of Ministry of Earth Sciences, Government of India, 28-30 December, 2012. p 53-55, ISSN: 978-81-923052-2-6
- (ii) Dutta A K, Dutta A, Deb S K (2010) *Challenges of Active Seismic Control of Cable-stayed bridge: A case Study*, 26th National Convention of Civil Engineers Guwahati, 09-10 October, p 103-114.
- (iii) Dutta Atanu K, Deb S K, Dutta A (2006), *Active control of a cable stayed bridge against multiple support seismic excitation*, 13th Symposium on Earthquake Engineering, Roorkee, India, Dec 18-20

10. Technical Talks

- (i) Faculty member for *Earthquake Resistant Practices for Students of Architecture* at NICEE, IIT Kanpur, during 2010-2021
- (ii) *Bhuj Earthquake and the Ahmadabad Experience: A Structural Engineering Perspective* , Training On Earthquake Preparedness & Mitigation, District Disaster Management Authority, Sonitpur 24-28 January, 2012
- (iii) Expert talk for professional engineers engaged in *Sarva Siksha Mission*, Organized by POWIET
 - (i) *Earthquake resistant building for school building*, 6th Oct, 2009
 - (ii) *Methodology for repair Renovation and Rehabilitation*, 6th Oct, 2009
 - (iii) *Design Aspects considering Earthquake Zone-V*, Organized by POWIET, 21st July, 2008

- (iv) *Use of Locally Available Material in Construction*, 21st July, 2008
- (iv) Seminar Lecture: *Cable –Stayed Bridges Modeling and Model Updating- A comparative Study* 2006, School of Engineering and Applied Sciences, Washington University in St. Louis, USA.
- (v) Seminar Lecture: *Cable-Stayed Bridges: Modeling and Control Issues- A case study*, 2006, Dept of Civil and Environmental Engineering, College of Engineering and Computing, University of South Carolina, USA

11. Expert talks in QIP/NPEEE/NICEE Short term course/Workshop

- (i) *Confined Masonry*, AICTE-NEQIP Sponsored Short Term Course on Recent Advances In Civil Engineering, Jorhat Engineering College 8th - 12th December, 2015
- (ii) *Rapid Visual Screening of Buildings*, AICTE-NEQIP Sponsored Short Term Course on Disaster Management, Jorhat Engineering College September, 9th-13th February, 2015
- (iii) *Design of steel structures using IS 800:2007*, AICTE Sponsored Short Term Course, 9-20th June, 2014
- (iv) *Modern Structural Control using LQG, Part 1 and Part2*, QIP short term course at IITG: Seismic Retrofitting of Buildings- Conventional and Structural Control Based Approaches, November 27- December 1 , 2006
- (v) *Modeling and Control Issues- A case study on Cable-Stayed Bridges* QIP short term course at IITG: *Recent trend in Design and Analysis of Highway Bridges*, December 2-7, 2004
- (vi) *Seismic Analysis and Control of Cable-Stayed Bridges*, QIP short term course at IITG on presented in *Seismic Design and Health Monitoring of Bridges*, May 9-13, 2005

11. Research Projects Ongoing/Handled

- (i) Investigator of *Seismic Vulnerability of traditional stilted houses in flood-plains of Assam* under RPS- NER. Sponsored by AICTE under RPS_NER (File No. 8-119/RIFD/RPS-NER/Policy-1/2018-19)
- (ii) Co-Investigator of *Method for Seismic Assessment of RC Frame Buildings In India* (Project no: MoES/P.O.(Seismo)/1(48)/2009 Dated 30/12/2009 (File number: MOES/1522/09-10.CASH)

12. Other Projects Handled

(i) *Modernisation Of Computational Laboratory* (2010) Department of Civil Engineering,

JEC, Project Value(10 Lakhs) sponsored by AICTE, MHRD, Govt. of India.

(ii) *Modernisation of Structural Engineering Laboratory* (2010) Department of Civil

Engineering, JEC, Project value(15 Lakhs) sponsored by AICTE, MHRD, Govt. of India.

(iii) *Upgradation of Educational Technology* (2010) Department of Civil Engineering, JEC, Project value(15 Lakhs) sponsored by AICTE, MHRD, Govt. of India.

13. Reviewer of text books/world conference

Sl No.	Details	Organisation	Year
i	Basic Structural Analysis	Tata Mc Graw Hill	2010
ii	Fundamentals of Steel Structures	Tata Mc Graw Hill	2012
iii	World conference on Earthquake Engineering,	WCEE	2016

14. Research Guide

Sl No.	Organization	Year
i.	Tezpur University	2010
ii.	Gauhati University	2012
iii.	Dibrugarh University	2014
iv.	Assam Science and Technology University	2018

15. Books/e-books/book chapter

- i. Published Book: Atanu Kumar Dutta,(2012)“Seismic control of Cable stayed bridge-Intricate Issues in modelling”, Lap LAMBERT Academic Publishing
- ii. How safe is your building from earthquake, Prantik, June,16-30,2010
- iii. Accepted for publication: E-book: Seismic Performance of traditional stilt houses of North-East India, Lap LAMBERT Academic Publishing

16. Academic Responsibilities

- (i) Member, Board of Studies in Engineering, Dibrugarh University with effect from 11.08.09

- (ii) Member board of studies in Engineering, NERIST from 2010
- (iii) Member Academic council, Jorhat Engineering College from 2009-2010
- (iv) Paper setting and evaluation of answer scripts for final year students since 1997-2010
- (v) Professor I/C JEC college magazine

17. Administrative Responsibilities

- (i) Principal *i/c*, Jorhat Institute of Science and Technology, Jorhat(2021-present)
- (ii) Head, Dept of Civil Engineering, School of Engineering, Tezpur University(2010-2012)
- (iii) Nodal Officer for NEC project evaluation for upper Assam(2010-11)
- (iv) Superintendent Jorhat Engineering College, Girls' Hostel(1998-2000)
- (v) Project Manager, Building Centre, JEC(1997-99)

18. Consultancy works:

- (i) Structural design check of bridges for Indian Railways.
- (ii) Design of 3-storied College building, JEC
- (iii) Double-storeyed Training and placement office building, JEC
- (iv) Structural design of platforms for ONGC rigs
- (v) Mix design, Foundation design for various industrial projects such as ONGC, GAIL etc.

19. Literary work:

(a) Popular Science-Technology articles in Assamese (titles translated):

- (i) Bad Science, Book review in Assamese monthly, Prakash, Publication Board of Assam, December(2020)
- (ii) How safe is your building from earthquake, Prantik, June,16-30,2010
- (iii) Vaastu Vs Modern Science, Prantik, Dec, 16-31, 2002
- (iv) Technical details for earthquake resistant buildings in Assam(Part1), Prantik, Feb, 16-28, 2001
- (v) Technical details for earthquake resistant buildings in Assam(Part1), Prantik, Feb, 16-28, 2001
- (vi) Vaastu- A different Perspective, Prantik, Dec, 16-31, 2000

(b) Book Chapters in Assamese (titles translated)

- (i) Technical Education in Assam (jointly with Dr. Achinta Nayan Bezbaruah), Trends in Culture of Science in Assam, 2007, Publication board of Assam, Govt. of Assam.
- (ii) The Architecture of Assam, Trends in Culture of Science in Assam, 2007, Publication board of Assam, Govt. of Assam.
- (iii) Chapter on Seismically Safe Buildings and Seismically Safe Bridges in Encyclopedia in Assamese published by Axom Sahitya Sabha.: Edited by Dr. Dinesh Ch Goswami.

20. Details of interaction with outside world (Technical only such as chairing, organising technical events, paper presentation to the conference etc., expert talk or radio talk on technical subjects, technical writing on news papers, reviewer to technical paper)

Sl No.	Details	Organisation	Year
i.	Member, Technical Committee, “Earthquake Risk Mitigation in the North East”	Govt of Assam	
ii	Advisory member, NICEE	IITK	2015- till date
iii.	Radio talk in Assamese on the topic “Bhuikop Protirodhi Flator Thakibologia goon”(Necessary quality of Earthquake resistant Flats)	All India Radio, Jorhat	2012
iv	Expert, “Safety Assessment of Type-I quarters at NERIST”	NERIST	2011
v	Reviewer of world conference on Earthquake Engineering	WCEE	2015
vi	Member, Coordination committee, Jorhat Institute of Science and Technology	JIST	2017
vii	Member, Vidyalaya Management Committee, Kendriya Vidyalaya, ONGC, Jorhat		2017- Present

21. List of Short Term Courses Organised/Conferences arranged/Course modules developed

Sl No.	Details of STTP/conferences organised	Venue	Date
1	Recent Advances in civil Engineering	Jorhat Engineering College	8-12 Dec., 2015
3	Impartus video lecture on GATE tutorial for on Structural analysis	Jorhat Engineering College	Dec, 2017
2	Impartus class work module for Structural Analysis	Jorhat Engineering	Spring, 2- 018

		College	
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22. Awards / Prizes received:

Name of awards / prizes	Year	Awards / prizes received from
INAE Teacher Fellowship for participation in an MOES project, <i>A proposed Rapid Visual Screening Procedure for Seismic Evaluation of RC Frame Building in India</i> at IIT Gandhi Nagar from 1.05.10 to 30.06.10.	2010	IIT, Gandhinagar
NPEEE overseas fellowship to a part of PhD work in the field of Earthquake Engineering in University of South Carolina, USA	2005	NPEEE, IITK
QIP Scholarship	2000	MHRD
GATE scholarship	1989	IIT KGP
Gold medal for securing 2 nd position in Assam High School Leaving Certificate Examination	1983	Govt of Assam, HMT Ltd

23. Memberships of Professionals/Learned bodies/Societies:

Name of the institution/society	Grade of membership	Date of election	Membership number
The Institution of Engineers (India)	Fellow	12.10.2017	F-122932-6
Indian Society of Earthquake Technology	Life	28.09.2006	LM 1294

24. Computational skills:

Programming Languages: C.

Tools: ANSYS, SAP, Matlab®.

Operating Systems: Linux, Windows.