

CV of Abhinandan Kalita

Name: **Abhinandan Kalita**

Designation: **Assistant Professor, Department of ECE, GIMT-Guwahati**

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Sex: **Male**

Date of Birth: **16-10-1988**

Educational Qualifications:

Sl. No.	Examination Passed	Year of passing	Board/ Council/ University	Specialization
1	HSLC/10 th Std.	2004	SEBA	-
2	HSSLC/10+2 Std. (Science)	2006	AHSEC	Science
3	Degree (Bachelor of Engineering)	2010	Gauhati University	Electronics and Telecommunication Engineering
4	Master's Degree (Master of Technology)	2012	Gauhati University	Electronics and Communication Technology (SPC)
5	Ph. D.	Pursuing	NIT Meghalaya	Signal Processing/ Machine Learning
6	Post Graduate Diploma in Computer Application (PGDCA) 1 year	2011	Institute of Information Technology of Assam	PGDCA

Languages known: **English, Hindi, and Assamese** (Read, Write & Speak)

Academic/Administrative Experience:

- (1) 10+ years of Teaching Experience as Assistant Professor.
- (2) 6+ years of Research Experience.
- (3) Tech Guru and Working Member, AICTE IDEA lab (2021-till present).
- (4) Instrumental in setting up the AICTE IDEA Lab, GIMT-G [funding of 1.1 crores] (2021-22).
- (5) Organized 20+ events at AICTE IDEA Lab from June 2022 -till present [as Course Demonstrator].
- (6) Faculty Coordinator, M. Tech (ECE) Programme (2019- till present).
- (7) Nodal Officer, Ek Bharat Shreshtha Bharat Program of AICTE (2020-till present).
- (8) Nodal Officer, Azadi Ka Amrit Mahotsav Program of AICTE (2022-till present).
- (9) Member, Admission Committee, GCU, (2022-till present).
- (10) Member, Magazine Committee (GIMTech), GIMT-Guwahati, (2021-till present).
- (11) Member, Sports Club (2016-till present).
- (12) Member, Social Welfare Club (2016-till present).
- (13) Faculty Coordinator, Cultural Club, GIMT-Guwahati (2016-18, 2022-till present).
- (14) Instrumental in setting up the Cultural Club of GIMT-G (2016).
- (15) Member, Digital Publicity Team, GIMT-Guwahati, 2021-22.
- (16) Coordinator-Cultural Committee, TECHMILAP-2022.
- (17) Member, All Assam Principals' Meet and Inauguration of AICTE IDEA Lab, 28th May 2022.
- (18) Organized 3 events as Coordinator (funded by MHRD under TEQIP-III, funding of Rs. 97,790/-).
- (19) Coordinator, Rap Battle, Euphuism-2020
- (20) Coordinator, Graduation Ceremony-2019.
- (21) Member Central Admission Cell, GIMT-Guwahati, 2016-18.
- (22) Departmental Admission Coordinator, Dept. of ECE, GIMT-Guwahati, 2016-18.
- (23) NBA Module Coordinator, Dept. of ECE, 2017-18.
- (24) Co-Coordinator, Smart India Hackathon, 2017 and 2018.
- (25) Co-Coordinator, Samantrana, 2017 and 2018.
- (26) Faculty-In charge, Institutional Swachhta Ranking Work, GIMT-Guwahati, 2016-17.
- (27) Chief Editor, Departmental Magazine, Dept. of ECE, 2016.
- (28) Guided 15 (fifteen) B. Tech projects from August 2012- till present.
- (29) Taught 42 theory courses and related labs for B.Tech and M.Tech program, Aug 2012- till present.
- (30) Mentoring of 15 students every year is done where progressive discussion on their academic performance as well as personal life is discussed.
- (31) Appointed as Examiner, Evaluator, Paper-Setter, Scrutinizer, Moderator, Invigilator, etc., for B. Tech and M.Tech examinations of Gauhati University and ASTU, 2012 – till present.

(32) Organized and acted as Coordinators for several events such as Regional Annual Students' Convention of ISTE, Assam and Eastern States Section, Workshops, Seminars, Webinars, Awareness Programmes on Engineering in Assam and Neighbouring States of NE, Flood Relief Camps, Cloth Donation Camps, Visit to Orphanages, Industrial Visits, Laboratory Exposure Programmes, Adopted Village Work, Euphuism etc.

List of Publications:

- (1) Abhinandan Kalita, "In-dept Understanding of LSTM and its recent advances in lung disease diagnosis", **World Journal of Advanced Research and Reviews**, eISSN: 2581-9615, CODEN(USA): WJARAI, Impact Factor: 7.8, Vol. 14, Issue 03, Pg. 517–522, June 2022. DOI: <https://doi.org/10.30574/wjarr.2022.14.3.0602>
- (2) Abhinandan Kalita, "Detection of COVID-19 using Modified VGG Architectures", **International Journal of Current Science Research and Review**, ISSN: 2581-8341, Impact Factor: 5.995, IPI Value: 2.87, Vol. 05, Issue 06, Pg. 2113-2118, June 2022. DOI: 10.47191/ijcsrr/V5-i6-40
- (3) Abhinandan Kalita, Dr. P. Rangababu and Prof. Shaik Rafi Ahamed, "Detection of COVID-19 using a Deep Neural Network with Transfer Learning Approach," **IEEE International Conference on Smart Technologies and Systems for Next Generation Computing** organized by IFET College of Engineering, Villupuram, Tamil Nadu, India during 25 - 26, March 2022.
- (4) Abhinandan Kalita, Dr. P. Rangababu and Prof. Shaik Rafi Ahamed, "A Study of LSTM and its Importance in Diagnosing COVID-19," 3rd **Research Conclave-2022** organized by National Institute of Technology, Meghalaya, Shillong, India, during 28th February to 1st March 2022 [**2nd best paper award (Oral Presentation-Engineering)**].
- (5) Abhinandan Kalita and Dr. P. Rangababu, "A Study of Ultrasound Elastography and Chest CT in the Diagnosis of COVID-19 Pneumonia," 2nd **Research Conclave-2021** organized by National Institute of Technology, Meghalaya, Shillong, India, during 28th February to 1st March 2021.
- (6) Abhinandan Kalita and Rajesh Kalita, "Early Detection of Diabetic Retinopathy," 3rd **National Conference in Recent Advances in Science and Technology** organized by Assam Science and Technology University, Guwahati (Under TEQIP-III), August 17-19, 2020.
- (7) Abhinandan Kalita, "Vessel Detection using Morphological Operations on Fundus Images," **International Research Journal of Engineering and Technology**, e-ISSN: 2395-0056, Impact Factor: 7.529, Volume 7, Issue 6, Pg 7661-7667, June, 2020.

- (8) Abhinandan Kalita, "Early Detection of Diabetic Retinopathy," **International Journal of Advanced Research in Science, Engineering and Technology**, e-ISSN: 2350-0328, Impact Factor: 6.646, Volume 7, Issue 6, Pg. 14249-14256, June, 2020.
- (9) Abhinandan Kalita, "Feature Set for the Extraction of Exudates for the Analysis of Diabetic Retinopathy", **International Journal for Research in Engineering Application and Management, UGC Journal No.-64077**, ISSN-2454-9150, Impact Factor: **5.646**, Vol. 05, Issue 03, Pg. 469-472, June, 2019.
- (10) Abhinandan Kalita, "Exudates Detection in Fundus Images," **International Journal of Computer Sciences and Engineering, UGC Journal No.-63193**, ISSN-2347-2693, Impact Factor: **2.638**, Page 516-521, Vol. 07, Issue 06, June, 2019.
- (11) Abhinandan Kalita, "Microaneurysm Detection in Fundus Images," **International Journal for Research in Engineering Application and Management, UGC Journal No.-64077**, ISSN-2454-9150, Impact Factor: **5.646**, Pg. 408-412, Vol. 04, Issue 02, May, 2018.
- (12) Abhinandan Kalita, "Analysis of Diabetic Retinopathy based on Texture Properties of Retinal Images," **International Journal of Computer Sciences and Engineering, UGC Journal No.-63193**, ISSN-2347-2693, Impact Factor: **2.638**, Page 516-521, Vol. 06, Issue 05, May, 2018.
- (13) Abhinandan Kalita, Anjan Kr. Talukdar and Kandarpa Kr. Sarma, "Medical Image Denoising Using Adaptive Threshold Based on Wavelet Transform," **International Conference on Electronics and Communication Engineering (ICECE-2012)**, Guwahati, India, Pg. 101-107, ISBN: 978-93-81693-56-8, June, 2012.
- (14) Abhinandan Kalita, Md. Sajjad Hossain and Kandarpa Kr. Sarma, "A New Approach to Image Denoising based on Wiener-LMMSE Scheme", **International Journal of Computer Applications (IJCA)**, Vol. 45, No. 22, pp. 41-47, ISSN: 0975-8887, Impact Factor: 0.745, May 2012.
- (15) Abhinandan Kalita and Md. Sajjad Hossain "DWT-DCT Based Iris Recognition Technique Using Self Organizing Map Neural Network", **International Journal of Graphics and Image Processing (IJGIP)**, ISSN: 2249 – 5452, Impact Factor: 3.26, Vol. 2, Issue 2, Pg. 98-104, May 2012.
- (16) Abhinandan Kalita, Anjan Kr. Talukdar and Kandarpa Kr. Sarma, "Comparative Analysis of Different Wavelet Families with a New Adaptive DWT based Image Denoising Technique," **International Conference on Electronics and Communication Engineering (ICECE-2012)**, Guwahati, India, pp. 82-92, ISBN: 978-93-81693-56-8, January, 2012.

Research Experience:

- Doctoral thesis guided: NA
- Research & Consultancy Projects:
Completed a research project entitled “Early Detection of Diabetic Retinopathy” as **Principal Investigator** with a sum of Rs. 2,45,000/- as research grant funded by World Bank under Collaborative Research Scheme of TEQIP-III Programme, MHRD, New Delhi (Jul 2019-Mar 2021).

Membership of Professional bodies:

- Professional Member: Institute of Electrical and Electronics Engineers (IEEE).
- Life Member: Indian Society for Technical Education (ISTE) with Membership ID- 100352.
- Life Member: International Association of Engineers (IAENG).
- Life Member: International Society for Research & Development (ISRDR).

Award, Fellowship & Recognition:

- (1) Received the **2nd best paper** award in the 3rd Research Conclave organized by National Institute of Technology, Meghalaya, Shillong, India, during 28th Feb to 1st Mar 2022.
- (2) Earned the title **TECH GURU** by AICTE-IDEA Lab at New Delhi on 23rd November, 2021.
- (3) Secured **3rd position** in Music Club Annual Competition 2021 at NIT Meghalaya.
- (4) Appointed as a **Reviewer** in Researchscript International Journals.
- (5) Certificate of Recognition for participating as a **Reviewer** in the peer review process for International Journal of Research in Electronics.
- (6) Invited as an **External Examiner** at Assam Royal Global University, Guwahati during 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22.
- (7) Obtained **NEC Scholarship** from Govt. of India during M.Tech Course from 2010-2012.
- (8) Placed among **Top 3%** (97 Percentile) in the 6th NIIT National I.T. Aptitude Test, 2010.
- (9) Selected for **BEAM ROBOTICS** workshop at IIT-Madras [Only team from NE Region] (2008).
- (10) Obtained **Scholarship** from State Board for HSLC result (2004).
- (11) Secured **Rank 7th & 11th** in the National Science Olympiad (2001 and 2002).
- (12) Secured **Rank 5th** in the Mathematics Olympiad (2002).



(Abhinandan Kalita)

Date: 05-01-2023