Curriculum Vitae

Name	**Arnab Bishnu Chowdhury**
Address	'Sangeetalayam', 76, Mariamman Koil Street, Vaithikuppam, 605012, Pondicherry, India
Telephone	Cell: + 91 98940 29256
E-mail	arnab@ninad.in
Nationality	Indian
Date of birth	28.05.1974.

Education

- Third generation from a family of Indian Classical musicians
- Traces a rich musical lineage from Baba Allaudin Khan (Maihar Gharana) - the Guru of Pandit Ravi Shankar (sitar maestro), Ustad Ali Akbar Khan (sarod maestro), Pandit Rabin Ghosh (Indian violin maestro, Arnab's grand uncle)
- Indian Classical music from Sri Arun Bishnu Chowdhury (Arnab's father, vocalist, Maihar Gharana, disciple of Pandit Rabin Ghosh)
- Classical Piano from Ms. Suzanne Sekhon (cellist, Wichita Symphony Orchestra, faculty at Sri Aurobindo International Centre of Education)
- Tabla from Mr. Tarun Banerjee (disciple of Ustad Keramatullah Khan, Farukhabad Gharana, faculty at Sri Aurobindo International Centre of Education)

Bachelor's at 'Sri Aurobindo International Centre of Education' (SAICE), Pondicherry, 1995.
Majored in Computer Science, Indian Philosophy, Chemistry, English, French

Introduction

Arnab B. Chowdhury has over 18 years of experience in the composition-science-therapy of music and sound, media design and pedagogy development.

He is founder of Ninād (2001 - Present), a consulting network (www.ninad.in). Music-Movement-Mind forms the context of all projects of Ninād. Music sustains all movements, human and cosmic. This holistic view guides Ninād's music and media composition services.

He grew up at Sri Aurobindo Ashram, (www.sriaurobindoashram.org, Pondicherry, south India), a spiritual community based on the Vision of Integral Yoga founded by Sri Aurobindo and the Mother (Mirra Alfassa).

Arnab gave his first professional performance on Tabla at the age of 13 accompanying late Arun Chowdhury (Indian classical vocal) at Bharatiya Vidya Bhavan, a *sabha* organised by Dr. Salem S. Jayalakshmi (noted Indian musicologist and vocalist) during the Madras Music Season, 1987.

As Computer Music Researcher at XTCsound Lab, part of MIT Media Lab (Boston, Bangalore)**,** he was a team member of 'Karaoke-on-Demand Machine' project which is ranked among the top 25 inventions from MIT Media Lab.

As member of Sri Aurobindo Ashram Trust's Research Group (2007 – Present), he offers Ninād's services as *Seva*. The work involves a yearlong preparation of a qualitative action research report on Integral Education at SAICE. This report gets incorporated into Annual Research Report of Sri Aurobindo Ashram Trust that reaches Department of Scientific and Industrial Research, Govt. of India.

Work experience

❖ **Composer, Teacher for Music Therapy Development and Implementation, 2006 - Present**

o Ninad has developed its own therapy programme – 'Know Your Rhythm' (KYR) - a programme to discover and express your musicality and your own sense of rhythm. Aimed at training music therapists, therapists from other disciplines, teachers, and healthcare practitioners, this programme primarily connects music therapeutically with kinesthetics, speech therapy, proprioception. Over 500 children with special needs and their 45 special educators have been the beneficiaries of the intermediate level of this programme.

o Two phases of KYR have been implemented at Special School, CERTH-India Hospital, Pondicherry. An output of this programme is 'Ta Na Na Song' composed with students and teachers, created with musical phonetics from Indian folk and classical system, transcending language barriers therefore can be sung by anybody. http://therapy.ninad.in/

o 14th World Congress for Music Therapy, July 2014, IMC University of Applied Sciences (Krems), University of Music and Performing Arts (Vienna): One of the 9 music therapy researchers worldwide to take a full day Pre-Congress Seminar called 'Healing Rhythms from India'. The international audience had researchers from music therapy, occupational therapy, medical practice and cultural anthropology (http://www.musictherapy2014.org)

o 'The 'Aha!' Moment - Experiments and Experiences of Composing for Music Therapy' - a paper based on the above abstract was presented at the 2nd International Conference on 'Current Trends in Music Therapy Education, Clinical Practice and Research' at Center for Music Therapy Education and Research, Mahatma Gandhi Medical College and Research Institute, Pondicherry, June 23rd 2015. The entire proceedings and papers were published online by the "International Journal of Pharma and Bio Sciences" (IJPBS), June 23rd 2015. IJPBS is an international journal in English published quarterly.

Experimentation of KYR has been carried out at:
▪ Music Therapy implementation at Special School, CERTH-India Hospital, Pondicherry
▪ Music as Therapy – workshop for senior government officers at Sustainable Livelihood Institute (SLI) for finding one's own rhythm to make better decisions in stressful work conditions. SLI is a joint initiative between the provincial government of Tamil Nadu and Auroville Foundation, south India. SLI strives to bring about a holistic transformation of humanity's present systems - social, economic, cultural, educational, political.
http://sli-av.blogspot.in/2016/03/interviews-music-therapy-for-wellness.html
▪ Satya Special School, Pondicherry – for children with special needs (Autism, CP, MR)
▪ Receptive Music Therapy at Geriatric section at Sri Aurobindo Ashram Nursing Home (Pondicherry)
▪ Receptive Music Therapy at Archives Department, Sri Aurobindo Ashram Trust
▪ Workshop for Music Therapists at Chennai School for Music Therapy

❖ **Computer Music Researcher, XTCsound Lab, Bangalore-Boston, 1998 – 2000**

Music Perception and Cognition

▪ Team member of XTCsound Lab – a joint lab between 'Music, Mind, and Machine Group' at the MIT Media Laboratory and Analog Devices Inc. (Boston-based semi conductor company). XTCsound was a research group focusing on music and the cognitive investigations describing it.

▪ Research and composition with Csound (Open Source based audio processing system, computer music language);

▪ Team member of 'Karaoke-on-Demand Machine' project which is ranked among the top 25 inventions from MIT Media Lab

http://www.media.mit.edu/sponsorship/getting-value/collaborations/taito
http://newsroom.blogs.cnn.com/2010/10/12/the-big-i-mit-media-lab-turns-25/

At XTCsound Lab, the projects and research used empirical and theoretical methods to learn more about the structure of music (music improvisation, pitch, tempo etc.) with sound (psychoacoustics, sound design) with Computer Science (Artificial Intelligence), as well as its effect on sociological groups (human emotional response, prediction of human rhythm)

Csound became the parent technology to MPEG 4 Structured Audio technology, a component to MPEG 4 technology used to encode-transmit-playback digital media today

❖ **Consultant, Communication Design Group, Infosys Technologies, Bangalore, 1996 - 1998**

 Music and Multimedia Design

- 'Super Yuki'- software product for primary school children to learn-compose-arrange-mix digital music and media, developed for NEC Corporation's Educational Systems Division (Tokyo). He received 'Mindware' star award for design, 1996

- Member of the design team that developed Infosys' digital multimedia-based Annual Report 'Social Responsibilities of the Corporate Body', the 1st of its kind in India, 1996

- Composed music and designed sound for multimedia productions for organisations such as IBM (UK), Intel (Singapore), Denon (Tokyo), Britannia (Bangalore)

❖ **Pedagogy Development, 2001 - Present**

- Member of Sri Aurobindo Ashram Trust's Research Group (2007 – Present). He is responsible for the qualitative action research report on Integral Education at Sri Aurobindo International Centre of Education (SAICE). The Annual Research Report of Sri Aurobindo Ashram Trust reaches Department of Scientific and Industrial Research (DSIR), Govt. of India.

- Faculty Member at Sri Aurobindo International Centre of Education (SAICE), designed and taught 'Composition & Communication'

- Member of the Panel of Experts of Club of Amsterdam, Amsterdam, an interdisciplinary think tank

- '*Parampara*' – member of the design team that built an electronic Archiving system for the world's largest palm leaf manuscripts collection on Saiva Siddhanta archived at the Indology departments of Institut Français de Pondichéry (IFP) and Ecole Française d'Extrême Orient (EFEO), Pondicherry, Govt of France. *Parampara* was incorporated as part of UNESCO's Memory of the World Register in 2003 (http://ifpindia.org/content/indology)

- 'Dino Lab' - a 2D computer strategy game for primary school children, NEC Educational Systems Division, Tokyo, 1996

Music Composition and Production

1. 'Water Beat' – celebrates World Water Day (March 22nd, 2016), traces the lifecycle of water (https://soundcloud.com/arnabchowdhury/water-beat)

2. 'Koham-Soham' – Oratorio to 'Who' in 3 movements, with a contemporary touch, inspired by Sri Aurobindo's short poem 'Who' (http://koham-soham.ninad.in/)

3. Performed his own composition 'Spandan' ('Cosmic Pulsation') for the Opening Ceremony at 14th World Congress for Music Therapy, July 2014, Austria.

   'Spandan' dips into *Natyashastra* with *Nava Rasas* (Indian Aesthetics), *Ragas, Talas*, set in a contemporary context in two movements: one on the Piano, and the second on the Tabla. The two movements are woven by a leitmotif expressed in 'Kafi Thaat', July 2014, http://austria.ninad.in

4. 'Spandan - the triple movement' (CD) Raga-based orchestral composition (Contemplation – Compassion – Empathy) specially created for the World Congress for Music Therapy, Austria, July 2014.

5. 'Rhythms of Nature', a thematic for 5 orchestral compositions. Performed by 430 participants with age ranging from 6 to 80 presenting callisthenics, martial arts, marching, folk dance celebrating 70th anniversary of SAICE at Sri Aurobindo Ashram's Sports Stadium, December, 2013

6. 'Nachiketa'(2013) – a chamber music opera (English), conceived as a symbol of hope for traumatised children of war worldwide. Percussion composition with Tabla performance with Dr. Nigel Osborne (Scottish composer, music therapy activist) and group

Films - Music and Media Design

7. 'Musical Ode to Nadukuppam' composed for 'A Vision of a Coromandel Coast' (2016) - a documentary film on holistic rural development, Auroville, India

8. 'Walls & Beyond – a journey within' (2015): poetic and musical composition with images, a short film created in collaboration with Dr. Jean-Pierre Muller, former Director General of Institut Français de Pondichéry (IFP), Govt. of France

9. 'A God's Labour – an Oratorio in 5 movements, a theatrical musical rendition of Sri Aurobindo's poem 'A God's Labour', Ashram Theatre, Pondicherry (http://gl.ninad.in)

10. 'Epiphany' (2014), in collaboration with Russian photo artist, Ritam (Dimitri Melgunov), celebrating 100 years of The Mother's (co-founder, Sri Aurobindo Ashram) arrival in Pondicherry. Premiered at Saint Petersburg (Russia), 2014 (http://epiphany.ninad.in)

11. 'God at Work' (2014), computer music with photo stills, a therapeutic synthesis of Vedic chanting - Raga music - Computer Music. Presented at New York City Electroacoustic Music Society, New York University. The music has been inspired by Sri Aurobindo's epic poem 'Savitri'. (http://god.ninad.in)

12. 'Mudra Motifs' (2013): a music-centric collage that traces symbolic gestures during moments that celebrate Divinity across Guruvayur, Durga Puja at Shantiniketan and Kolkata, Masi Magam. Premiered at International Auroville Film Festival 2013; reached the Public Diplomacy Division, Ministry of External Affairs, Govt. of India (http://mudra.ninad.in)

13. 'My Forest has a Face' (2013): a conversation between the poet and the forest in the form of a poem, as experienced in Pitchandikulam forest, Auroville. Presented at 3rd International Water Symposium, Tamera, Portugal, 2013; reached United Nations Forum on Forests (UNFF), New York, 2013 (http://face.ninad.in)

14. 'The Secret Knowledge' (2013) animation film that presents the symbolism by drawing inspiration from Sri Aurobindo's epic poem 'Savitri' (The Secret Knowledge, Canto IV, Book I, The Book of Beginnings). Premiered at International Auroville Film Festival 2013. (http://symbols.ninad.in)

15. 'Evolution Fast-Forward' (episode I, 2011, episode II, 2015): animation film inspired by the Vision of Sri Aurobindo and The Mother, co-founders of Sri Aurobindo Ashram and Auroville. Presented at International Auroville Film Festival 2011; AUM Conference, California, 2011 (http://www.sopanam.org)

16. 'La Renaissance', dance drama in French, creating environmental awareness with the metaphor of caterpillar turning to butterfly, Kindergarten, Sri Aurobindo International Centre of Education (SAICE), 2003

Diverse Publications

17. 'When Zero means All', Arnab et al., Club of Amsterdam Journal, Amsterdam, June 2010; delves into proprioception and ergonomics as applied in oral care in clinical settings and community care model http://www.clubofamsterdam.com/press.asp?contentid=821#article06

18. 'When Technology Meets Health Care in Knowledge Society...Aurosiksha: online learning platform for blindness prevention workers', Arnab et al., CSI Communications Journal, Mumbai. The case study was selected among the top 4 papers at SEARCC 2011 seminar (South East Asia Regional Computer Confederation). http://aravind.org/aboutus/casestudiesOnAravind.aspx

19. The Pebble Collector', 'The Wall', 'The Myriad called I', poems in English, published in The Mother India (cultural review), Sri Aurobindo Ashram Trust, Pondicherry, 2004 – 2006

20. 'Creating Computer Music with Csound', Analog Devices, Bangalore; 106th Audio Engineering Society (AES) Convention, Munich, May 1999