



MR. HEMARAJA NAYAKA S

M.Sc. (Speech-Language Pathology) · PGDBEME · DHA&ET

Associate Professor · Department of Audiology & Speech-Language Pathology

AI-Enabled Stroke-Rehabilitation Specialist & Clinical Bioethicist

Yenepoya Medical College Hospital · Yenepoya (Deemed to be University), Mangaluru

Submitted in application for the post of Senior Associate Professor

Audiologist · Speech-Language Pathologist

CONTACT

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PROFESSIONAL REGISTRATION

RCI A30294

Central Rehabilitation Register (since Apr 2013)

ISHA L-13072161

Life Member (since Jun 2013)

DIGITAL PROFILES

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CORE EXPERTISE

- ▶ Dysphagia & Stroke Rehabilitation
- ▶ Voice Disorders & Acoustic Analysis
- ▶ Head & Neck Cancer Rehabilitation
- ▶ WHO-ICF Clinical Frameworks
- ▶ Vestibular & Balance Assessment
- ▶ AI-Assisted Clinical Tools
- ▶ Bioethics & Research Ethics

AI / TECHNICAL

- ▶ Claude API · MCP · Cowork
- ▶ Google AI Studio · Gemini
- ▶ GitHub · Cloudflare · Docker
- ▶ R · Praat · Epi Info · SaTScan

LANGUAGES

English Full professional

Kannada Native / bilingual

Hindi Full professional

Telugu Professional working

An Audiologist and Speech-Language Pathologist with over 13 years of clinical, academic, and research experience, I specialise in dysphagia and stroke rehabilitation, voice disorders, and head-and-neck-cancer rehabilitation, working within the WHO-ICF framework across Kannada-, Telugu-, Hindi-, and English-speaking populations.

My work uniquely fuses front-line clinical practice with the development of AI-powered clinical tools. I have designed and prototyped Nexus Ethics AI, TinySteps, VakSiddhi, and the DSRS–Clinician Suite, and I am building a coordinated suite of approximately 30 specialised AI agents for clinical assessment, documentation, and training. In my current role I developed an AI-assisted stroke-rehabilitation simulation workflow that automated assessment protocols, with a reported reduction of roughly 30% in assessment time.

I am a final-stage PhD candidate (Neurogenic Speech Disorders & Dysphagia) at Yenepoya, a Rehabilitation Council of India–registered practitioner (A30294), and an ISHA Life Member (L-13072161), with a 2026 Anthropic Academy AI-certification track and MoCA, WHO-GBT, and ICH-GCP credentials supporting my dual clinical–computational profile.

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1. Academic & Clinical Appointments

The following positions trace my progression from research fellowship to my current associate professorship, blending teaching, clinical service, research, and — most recently — applied AI development.

1.1 Associate Professor — Yenepoya Medical College Hospital, Mangaluru

June 2019 – Present (Associate Professor since May 2024; Audiologist & Speech Pathologist, 06/2019–10/2020)

- **Developed an AI-assisted stroke-rehabilitation simulation workflow** that automated clinical assessment protocols, with a reported reduction of approximately 30% in assessment time.
- **Led the establishment and statutory accreditation of the BASLP programme**, coordinating Rehabilitation Council of India (RCI) and Rights of Persons with Disabilities (rPwD) inspections to regulatory standard.
- **Contributed to open-source work on AI bioethics**, translating clinical-ethics expertise into reusable computational tools (Nexus Ethics AI).
- Designed and revised UG (BASLP) and PG curricula, lesson plans, and micro-teaching practice; delivered seminars for postgraduate students in Otorhinolaryngology.
- Coordinate and co-guide PG theses and UG research projects; organise workshops, conferences, and webinars in Audiology & SLP.
- Lead community outreach and industrial hearing-health screening camps extending departmental service across the region.

Two years completed in the designation of Associate Professor as of May 2026.

1.2 Assistant Professor — Dr. M. V. Shetty College of Speech & Hearing, Mangalore University

December 2017 – May 2019

- Delivered PG and UG teaching in Audiology & SLP, combining clinical supervision with curricular development.
- Supervised postgraduate research, guiding students through design, data collection, and dissertation preparation.

1.3 Assistant Professor — Kasturba Medical College (KMC), Mangalore / MAHE

October 2016 – October 2017

- Designed course curricula, delivered lectures, and coordinated research projects across PG and UG programmes; conducted certificate courses.

1.4 Lecturer — Samvaad Institute of Speech & Hearing, Bangalore University

December 2014 – September 2016

- Combined clinical, academic, and curricular work with PG research supervision; initiated outreach programmes at ESI Hospital and Bowring Hospital.

1.5 Earlier Research & Clinical Roles

- **Neurophysiology Technical Assistant** — All India Institute of Medical Sciences (AIIMS): data collection and research assistance (Jan–Feb 2014).
- **Research Officer & Junior Research Fellow** — Dept. of Speech Sciences, AIISH, Mysuru (Sep 2012 – Oct 2013): DST-funded project “Servo Control Mechanism in Persons with Stuttering”; speech-production and feedback-mechanism research, data analysis, and conference presentations.

2. Consultant & Volunteer Clinical Roles

Beyond my salaried appointments, I provide ongoing consultant speech-language pathology and audiology services to community and special-education organisations.

2.1 Lions Clubs International (India) – Consultant SLP & Audiologist

June 2019 – Present

- Deliver rural hearing-health-care services and run an early-intervention centre for speech, hearing, cognitive-communication, and swallowing disorders.
- Implemented a Newborn Hearing Screening Programme across rural areas of Dakshina Kannada, Karnataka.

2.2 Chetana Special School – Consultant SLP & Audiologist

August 2022 – Present

- Provide early-intervention clinical services for children with hearing impairment and neurodevelopmental disabilities (ASD, ADHD, ID, CP).
- Run school-screening programmes and community-based rehabilitation.

3. Clinical Technology & AI Innovations

My distinguishing contribution is the translation of clinical and bioethical expertise into deployable AI tools. I work fluently with GitHub, Google AI Studio, Cloudflare, and Docker across the prototyping-to-deployment lifecycle.

- **Nexus Ethics AI** — an AI-assisted framework supporting ethical review and documentation workflows for clinical and research projects.
- **TinySteps** — a developmental-surveillance tool for monitoring early communication and developmental milestones in children.
- **VakSiddhi** — an AI-analysed Frenchay Dysarthria Assessment tool applying automated analysis to a standardised dysarthria protocol.
- **DSRS – Clinician Suite (Deglutech)** — a dysphagia screening, rehabilitation, and structured clinical-reporting suite (deglutech.pages.dev).
- **AI stroke-rehabilitation workflow** — automated assessment protocols within simulation-based stroke rehabilitation; reported ~30% reduction in assessment time.
- **Coordinated AI-agent suite** — design phase for ~30 specialised AI agents supporting clinical assessment, caseload documentation, training, and student supervision.
- **Hack 'A' Comm-2026 (AIISH, Mysuru)** — advanced to formal IP-sharing documentation stage (May 2026).

Toolchain: GitHub · Google AI Studio · Gemini Enterprise · Cloudflare · Docker · Model Context Protocol (MCP) · Claude API & Cowork.

4. Research Statement & Agenda

My research sits at the convergence of neurogenic communication and swallowing disorders, voice science, and the application of the WHO International Classification of Functioning, Disability and Health (ICF) to clinical assessment. The unifying question is how disablement in speech, voice, and swallowing can be measured in ways that are functionally meaningful, culturally appropriate to multilingual India, and useful at the bedside.

My doctoral work profiles oropharyngeal dysphagia in adults with acute and sub-acute stroke using a WHO-ICF-based protocol. A consistent thread is the anatomico-functional paradox in post-stroke dysphagia — the finding that lesion location and size do not straightforwardly predict swallowing-impairment severity — which argues for functionally grounded, ICF-aligned assessment over purely neuroanatomical classification.

In parallel I pursue voice science (acoustic, aerodynamic, and perceptual measurement) and applied AI for clinical assessment. My near-term agenda: (1) complete and disseminate the doctoral dysphagia work; (2) validate ICF-based swallowing-screening instruments; (3) clinically evaluate AI-assisted voice and motor-speech tools; and (4) build multilingual assessment resources. I am actively seeking extramural grant support to scale these lines.

5. Publications & Research Metrics

5.1 Citation Metrics (Google Scholar)

Source: Google Scholar export accompanying this dossier. An earlier 2025 snapshot recorded 4 / 1 / 0; the figures below reflect the most recent export.

Metric	All	Since 2020
Citations	7	7
h-index	2	2
i10-index	0	0

5.2 Peer-Reviewed Journal Publications & Book Chapters

Author names reproduced from source records; DOIs and citation counts included where available.

#	Title & Authors	Venue / DOI	Year · Cites
1	Automatic Assessment of Pathological Voice Quality Using Machine Learning Approaches S. P. S. H. Nayaka, S. Coelho, S. Hosahalli Lakshmaiah, S. Prabhu	Communications in Computer & Information Science (book chapter); SPELL 2024. DOI: 10.1007/978-3-032-05855-3_4	2024–26
2	Significance of Optokinetic After-Nystagmus in Peripheral Vestibular Disorders Disimi, Vijayalakshmi, Prateek, Hemaraja Nayaka S	Indian J. Otolaryngol. Head & Neck Surg., 77(7). DOI: 10.1007/s12070-025-05652-9	2025
3	Does Pregnancy Alter Voice Quality? V. Subramaniam, B. S. Subramaniam, S. Rai, S. B. Rao, H. N. S. Nayaka et al.	J. Dr. YSR Univ. Health Sci., 13(13), 112–118. DOI: 10.4103/jdryruhs.jdryruhs_77_22	2024
4	Effect of Maternal Diabetes Mellitus on Neonatal Hearing Hemaraja Nayaka S, Amrutha P., Nimalka M. Sequeira, Nayana V. G.	Indian J. Otolaryngol. Head & Neck Surg. DOI: 10.1007/s12070-023-04393-x	2024 · 1
5	Effect of Adenotonsillectomy on Spectral and Acoustic Characteristics P. S. N. Mohammed Jasim, V. G. Nayana, Hemaraja Nayaka	Indian J. Otolaryngol. Head & Neck Surg. DOI: 10.1007/s12070-023-03967-z	2023 · 2
6	Profile of Hyperacusis and Tinnitus Among Traffic Police Exposed to Noise Hemaraja Nayaka S, Maqbool M. Abdul, Deekshith Rajmohan	Int. J. Otorhinolaryngol. Head & Neck Surg., 8(8). DOI: 10.18203/issn.2454-5929.ijohns20221885	2022 · 2
7	Voice Quality Measurement as an Indicator of Treatment Efficiency in LPR Disease Machancheri, Fousiya, M. K., H. Nayaka S	Bengal J. Otolaryngol. Head Neck Surg., 29, 169–175. DOI: 10.47210/bjohns.2021.v29i2.466	2021
8	Journey of Hearing Health Care in India: Historical Perspectives V. Subramaniam, S. Hemaraja Nayaka	Arch. Med. Health Sci., 9(1), 151–155. DOI: 10.4103/amhs.amhs_125_21	2021
9	A Profile of Verbal Fluency Measures in Individuals with Non-Fluent Aphasia	Global Scientific Journal, 9(12), 1192–1237.	2021

#	Title & Authors	Venue / DOI	Year · Cites
	S. K. Nandisha Ganiga, Hemaraja Nayaka, S. J. Shetty, V. L. Shetty		
10	Happiness Index among Audiologists and Speech-Language Pathologists of India M. Raj, H. N. S., S. Kumar	Language in India, 20(1), 138–154.	2020 · 1
11	An Objective Measure of Naming Errors in Individuals with Traumatic Brain Injury A. V. S. K. Ferly Felix, Hemaraja Nayaka S	Language in India, 19(1), 403–413.	2019 · 1
12	Dysarthria–Dysphasia–Dysphagia in Hodgkin's Lymphoma with HIV: A Case Report Hemaraja Nayaka S, Jayashree Bhat, Namratha, Ashwini	Neurorehabil. Neural Repair, 32(4-5) (abstract). DOI: 10.1177/1545968318765498	2018
13	Immediate Effect of Lozenges (Strepsils) on Acoustic & Aerodynamic Voice Parameters S. Roosafida, H. Nayaka S, N. Sharma, Sneha	Frontiers of Research in Speech and Music.	2016
14	Effects of Prolonged Loud Reading & Vocal Recovery on Acoustic/Aerodynamic Parameters H. Nayaka S, R. Rajasudhakar	Frontiers of Research in Speech and Music.	2012
15	Evaluation of Newborn Hearing Screening in High-Risk Infants, Gauhati Medical College H. Nayaka S, P. Saravanan, A. K. Biswas, K. Barau	Annual J. Otolaryngol. Head & Neck Surg., 17.	2009

5.3 Recent / Forthcoming Manuscripts

- **The Anatomico-Functional Paradox in Post-Stroke Dysphagia** — Hemaraja Nayaka S, V. Subramaniam (Manipal Quest 2.0, 2025).
- **ICF as a Triage Tool: Stratifying Dysphagia Risk in Acute Stroke Patients** — Hemaraja Nayaka S, V. Subramaniam (Manipal Quest 2.0, 2025).
- **ICF-DAT Manual** — Hemaraja Nayaka S, V. Subramaniam (2025).
- **Visual Signal Typing in Voice Assessment: A Systematic Review** — P. S. Hegde (first/corresponding), V. Subramaniam (second), Hemaraja Nayaka S (third; data extraction & quality appraisal). Target journal: [to be confirmed].
- **Doctoral manuscript on stroke & dysphagia outcomes** — in advanced revision (2026).

6. Conference & Symposium Presentations

6.1 Recent & International Participation (2025–2026)

- **Indocleftcon 2026**, Mysuru (7–9 May 2026) — cleft-palate-related communication disorders.
- **17th World Congress**, Barcelona, Spain (22–24 Oct 2025) — international participation. [congress name & paper title to be confirmed]
- **15th International Congress**, Kyoto, Japan (Oct 2025) — international participation. [congress name & paper title to be confirmed]
- **CGHH 2026**, Chennai (9–11 Oct 2026) — invited participant (forthcoming).
- **Clinical Conference** (May 2026) — oral and poster presentations.

6.2 NDS-CRE 2025, Thiruvananthapuram

- Focal Cortical Dysplasia: A Unifying Diagnosis for Refractory Language Disorder and Childhood Epilepsy — A Case Study (Rahmathunnisa, Shamila, Hemaraja Nayaka S).
- Low-Tech to High-Tech: Mapping AAC Technology Practices Among Indian SLPs in Neurodevelopmental Disorders (Alisha, Safa K., Praneetha, Minusha, Hemaraja Nayaka S).
- A Child with West Syndrome at Risk for DLD Secondary to Flaccid Cerebral Palsy and Seizure Disorder: A Case Study (Diyana D., Hanaan, Minusha, Hemaraja Nayaka S).

6.3 ISHA Kerala State Branch Annual Conference 2024, Kochi — Oral

- Differential Diagnosis in Cerebral Small Vessel Disease: SAAND and Hypo-Kinetic Dysarthria — A Diagnostic Case Study (Hemaraja Nayaka S, Ayisha Nahla P K, Mohammed Mubin, Kashvi Ganiga).
- Vocal Health Among Long-Term Inhaler Users (Shadiya Shukkoor, Rishana Ummer, Nuha Fathima, Hemaraja Nayaka S).
- Objective Measure of Sensory Regulation Using Stabilometry Among Typical Individuals: A Pilot Study (Hemaraja Nayaka S, Fathima Haneena, Ayisha Nahla, Kashvi Ganiga).

6.4 ISHA Kerala 2024, Kochi — e-Posters

- Primary Progressive Aphasia with Comorbid Alzheimer's & Vascular Dementia: A Multimodal Management Approach (Kashvi Ganiga, Rena, Farha, Hemaraja Nayaka S).
- Geographical Distribution of ASD and ADHD in Children: Spatio-Temporal Analysis Using SaTScan (Huda M. Saleem, Fahmida Farhath, Sharal C., Hemaraja Nayaka S).
- Implementation of AAC Technologies in Neurodevelopmental Disabilities by Indian SLPs (Hemaraja Nayaka S, Nuha Fathima, Fidha Fathima).
- Clinical Diagnosis & Management of Pill Dysphagia in Cervical Tuberculous Lymphadenitis (Fathimath Suhada, Ayisha Emin, Sithara Bathool).
- Motor Speech Profile in Alcohol Dependence Syndrome: Ataxic Dysarthria & Differentiation (Hemaraja Nayaka S, Fathima Hiba, Sithara Bathool).
- Geographical & Temporal Patterns of Hypo- and Hyperfunctional Voice Disorders Using Epi Info (Rishana Ummer, Shadiya Shukkoor).
- Computerized Cranio-Corpography (CCG) Among Males and Females: A Pilot Study (Aisha Noufel, Muhammad Yafis, Hemaraja Nayaka S).

6.5 Earlier Presentations (2013–2023)

- Breaking Barriers: AAC Strategies for Children with Neurodiverse Conditions in India — 11th IFNR Conference, 2023 (V. Subramaniam, Hemaraja Nayaka S).

- Assessing Swallowing Difficulty in Acute & Sub-Acute Stroke: Validation of the WHO-ICF — 11th IFNR Conference, 2023 (V. Subramaniam, Hemaraja Nayaka S).
- Lesion Location/Size and Dysphagia Severity in Acute & Sub-Acute Stroke — 11th IFNR Conference, 2023 (Hemaraja Nayaka S, Arjun Suresh, V. Subramaniam, Priyanka S. Nayak).
- Navigating Ethical Dilemmas in SLT for Patients with Vascular Dementia: A Case Study — RAAM-CD 2023 (Fathima Nisaana, Hemaraja Nayaka S).
- A Suspected Case of Drug-Induced Auditory Neuropathy Spectrum Disorder — 15th KSB ISHACON-23, 2023 (Akshay P. Vibin, Merin Mathews, Hemaraja Nayaka, Namitha C. V., Pratheeksha B.).
- Analysis of Dysphonia in Speech and Voice Among Individuals Post-COVID-19 — ISHA, 53(1), 255, 2022 (H. Nayaka, S. Prabhu, V. Subramaniam, Shaharbanu).
- Immediate Effect of Circumlaryngeal Massage on Voice Range Profile — 10th Kerala ISHA Chapter, 2019 (Hemaraja Nayaka S, Meenu S., Acsah V., Achshah R.).
- E-Screen Time (Mobile Use) and Language Development in Children — ISHA Conference, 2019 (Hemaraja Nayaka S, Ann M.).
- A Preliminary Study of Dysphonia Severity Index (DSI) in Dysarthria — WSPD/Interspeech 2018 (Florida P., Nayaka S. H.).
- Application of ELAN 5.1 Software: Instrumental Measure of Verbal Naming in TBI — WSPD/Interspeech 2018 (Florida P., Nayaka S. H.).
- Dysphonia Severity Index Among Typical Individuals and Individuals with Dysarthria — Ni-VAT, Nitte University, 2018 (Nayana P., Nayaka S. H.).
- Striato-Capsular Aphasia vs. Cortical Aphasias — Manipal Research Colloquium, 2018 (Shamiya S., Maria A., Nayaka S.).
- Semantic Fluency in Non-Fluent Aphasia Sequel to Cortical/Sub-Cortical Stroke in Tulu — ISHA Kerala, 2018 (Nandisha, Clerine, Aishwarya, Maithily Rai, Florida P., Nayaka S. H.).
- Acoustic Vowel Quadrilateral Space & Formant Centralization Ratio in Kashmiri — WESPAC-2018 (Shamiya S., Maria A., Satish K., Nayaka S.).
- Formant Centralization Ratio (FCR3) — Speech Intelligibility in Dysarthria — ICESC-18, 2018 (Ferly F., Bittoo T., Mishal, Florida P., Nayaka S. H.).
- An ICF Framework for Individuals with Dysphagia Following Stroke — ICESC-18, 2018 (Chethan K., Dyana, Florida P., Nayaka S. H.).
- Epidemiological Studies on Aphasia, Dysphagia & Dysarthria Sequel to Stroke in Coastal Karnataka — ICESC-18, 2018 (Nandisha, Maithily Rai, Florida P., Nayaka S. H.).
- Vocal Loading in Speech-Language Therapists: Aerodynamic Parameters — ISHA Conference, 2017 (Priyanka N., Nayaka S. H.).
- Immediate Effect of Lozenges on Acoustic & Aerodynamic Voice Parameters — Frontiers of Research in Speech & Music, 2016 (Roosafida, H. Nayaka S, N. Sharma, Sneha).
- Artificial Neural Network Classification System of Voice Disorders — IEEE Bangalore, 2015 (Radhika Poovayya, Nayaka S.).
- Cerebral Dominance & Laterality Preference in Persistent Developmental Stuttering — ISHA Conference 46, 2014 (Yelimeli G., Irfana, Sangeetha, Nayaka S. H.).
- Vocal Fatigue & Recovery Patterns in Adults Following Induced Vocal Loading — AIISH Master's Thesis, 2012 (H. Nayaka S, Rajasudhakar).
- Effects of Prolonged Loud Reading & Vocal Recovery on Acoustic/Aerodynamic Parameters — Frontiers of Research in Speech & Music, 2012 (H. Nayaka S, R. Rajasudhakar).

7. Invited Talks & Guest Lectures

Date	Talk / Role	Venue
01/2025	Invited speaker — clinical practice in SLP/Audiology	RCI Continuing Rehabilitation Education (CRE) Programme
02/2024	Hear from the Experts: Your Guide to a Vibrant Career in Audiology & SLP (career-guidance webinar, two sessions)	Online / Zoom
04/2024	Interdisciplinary approaches to ASD management	Autism & Music Therapy Symposium
05/2022	Outcome Measures in Voice Rehabilitation	SLPQuest, Bengaluru
06/2022	Guest / resource person & technical expert	NGO Audiology Clinic inauguration, Karkala, Udupi
10/2020	Newborn Hearing Screening Protocol in a Medical College Set-up	Sahasra ENT Foundation, Hyderabad
10/2020	Catch Them Early!! — Universal Newborn Hearing Screening (hands-on)	JSS Medical College, Mysuru
08/2020	Instrumental Analysis of Voice	Sahasra ENT Foundation, Hyderabad

8. Postgraduate Research Supervision & Mentorship

I regard research supervision as a structured apprenticeship in clinical reasoning — guiding students from a feasible, ethically sound question through ethics clearance, data collection, and analysis to dissemination, with emphasis on methodological rigour and honest reporting within the WHO-ICF and evidence-based-practice frameworks.

8.1 Ethics-Approved PG Research Projects Supervised (2020–2024)

Year	Project Title	Ethics No.	Principal Investigator	Co-Investigator(s)
2020	Voice Characteristics in Laryngopharyngeal Reflux Disorders	—	Dr. Fouziya	Dr. Mubeena; Hemaraja Nayaka S
2021	Effect of Adenotonsillectomy on Spectral & Acoustic Characteristics	—	Dr. Jasim	Dr. Nayana; Hemaraja Nayaka S
2021	Hyperacusis & Tinnitus Among Traffic Police with Noise Exposure	YEC2/345	Dr. Maqbool M. A.	Dr. Deekshith Raj Mohan; Hemaraja Nayaka S
2022	Bedside Dysphagia Evaluation in Acute/Sub-acute Stroke Using SAFE Protocol	YEC2/241	Dr. Arjun	Dr. V. Subramaniam; Hemaraja Nayaka S
2022	Optokinetic After-Nystagmus in Peripheral Vestibular Disorders	YEC1/2022/096	Dr. Dismi Mariya	Dr. V. Subramaniam; Hemaraja Nayaka S
2022	VNG & Dynamic Visual Acuity in Peripheral Vestibular Disorders	YEC1/2022/089	Dr. Maviya Abdul Azeez	Dr. V. Subramaniam; Hemaraja Nayaka S
2024	Peripheral Neuropathy, Autonomic & Vestibular Dysfunction in T2DM	SRB reviewed	Dr. Prathyusha	Dr. V. Subramaniam; Hemaraja Nayaka S

8.2 Current Mentorship & Doctoral Mentors

- **Ms. Shreya Srinivasan** — dissertation supervision (documentation & appendices, 2026).
- **Manu** — ongoing academic and research mentorship.
- **Doctoral mentors:** Dr. Jayashree Bhat; Dr. Vijayalakshmi Subramaniam; Dr. Mithun (Pediatrics).

9. Education

Period	Qualification & Institution	Specialisation / Thesis
07/2020 – present	Doctor of Philosophy (PhD) Yenepoya (Deemed to be University) — final submission stage	Neurogenic Speech Disorders & Dysphagia. Thesis: Profile of Dysphagia among Adults with Acute & Sub-acute Stroke using WHO-ICF protocol. Completion: [to be confirmed].
2020 – 2021	PG Diploma in Bioethics & Medical Ethics (PGDBEME) Yenepoya (Deemed to be University)	Medical, Clinical & Research Ethics. Dissertation: OTC Hearing Aids & Ethical Issues in the Indian Scenario.
2010 – 2012	M.Sc. Speech-Language Pathology AIISH, Mysuru (Min. of Health & Family Welfare, Govt. of India)	Aphasia, Voice & Fluency, Childhood Language Disorders, AAC, Biostatistics. Thesis: Effect of Vocal Loading on Acoustic & Perceptual Voice Parameters.

Period	Qualification & Institution	Specialisation / Thesis
2006 – 2010	B.Sc. Speech and Hearing AIISH, Mysuru	Audiology & SLP, Psychology, Electronics, Bio-statistics, Linguistics.
2005 – 2006	Diploma in Hearing Aid & Ear Mould Technology (DHA&ET) AIISH, Mysuru	Ear Mould Technology, Hearing Aid Repair, Electronics.
1997 – 2005	Schooling (VI to +2, PCMB) Jawahar Navodaya Vidyalaya, Chamarajanagar	AISSCE / CBSE.

10. Certifications & Continuing Education

10.1 AI & Computational Credentials — Anthropic Academy (2026)

A dedicated AI-certification track completed in March 2026, underpinning my clinical-AI development work. All credentials carry verifiable certificate IDs.

Certification	Authority	Verify ID
Claude 101	Anthropic	uotg8zc2dtv2
Claude Code in Action	Anthropic	4bbhou3zggv5
AI Fluency Framework & Foundations	Anthropic	xyjwf38c4keh
Building with the Claude API	Anthropic	gzk9kgnmgvoi
Introduction to Claude Cowork	Anthropic	revb2xmqxdek
Introduction to Model Context Protocol (MCP)	Anthropic	prfrwtcbbdn
AI Fluency for Educators	Anthropic	q999xpge5tkd
Teaching the AI Fluency Framework	Anthropic	ncprhb74acq5
AI Fluency for Nonprofits	Anthropic	frgsbgup7rtv
Create Your First Gemini Enterprise Application	Google (Apr 2026)	Credly verified

10.2 Clinical, Research & Regulatory Certifications

Certification	Authority	Period / ID
MoCA Cognition (Montreal Cognitive Assessment) — certified administrator	MoCA Cognition	Nov 2024 – Nov 2026
ICH Good Clinical Practice (Indian-GCP)	Yenepoya University	Dec 2024 – Dec 2027
WHO Global Benchmarking Tool for Assessors	World Health Organization (OpenWHO)	Mar 2024
Milestones Matter: Optimizing Developmental Surveillance	American Academy of Pediatrics	May 2025 – Apr 2028
Health Research Fundamentals	NPTEL	Mar 2021
Assessment & Rehabilitation of Vertigo and Balance Disorders	VBDAR (course VBDAR1.0/10)	[year to be confirmed]
Entrepreneurship Development	IIT Madras Pravartak / BodhBridge	Dec 2025
JRDBMS	Manipal ProLearn	Mar 2018

10.3 Domain Certifications — Head & Neck Cancer / Tracheostomy (Passy-Muir Inc., USA, 2023)

Course Title	Year
Early SLP Intervention for the Ventilated ICU Patient: Use it or Lose It!	2023
Tracheostomy: Procedures, Timing and Tubes	2023

Course Title	Year
Swallow Function: Passy-Muir Valves Use for Evaluation and Rehabilitation	2023
Aerodigestive and Respiratory Changes Post Tracheostomy: A Comprehensive Review	2023
Interdisciplinary Trach Team: Where Do I Start?	2023
Overcoming Barriers to Speaking Valve Use: Success through Teamwork	2023
End-of-Life Care and Patient Communication in Critical Care Settings	2023
Communication and Swallowing Management for ALS Patients with Tracheostomy	2023
Home Care Tracheostomy Team: Navigating and Networking	2023
Speaking Valve and Diaphragm Pacing: Changing Lives	2023
Paediatric Candidacy for Speaking Valve Use: Journeys to Success	2023

10.4 AAC Technology Certifications (Lingraphica Inc., USA, 2023)

Course Title	ASHA Pts	Date
AAC Goal Setting 101: Achieving Functional Success	Yes	15/07/2023
Autism and Lingraphica AAC Devices: Considerations and Strategies	Yes	2023
Conquering AAC: Getting Started with AAC and Lingraphica (Course 1)	Yes	2023
Conquering AAC: Putting AAC Concepts Into Practice (Course 3)	Yes	2023
Conquering AAC: Clinical Practices for a Successful AAC Device Trial (Course 2)	Yes	2023
EBP in Principles of Neuroplasticity for AAC Device Use	Yes	19/07/2023
Breaking Down Common Barriers to AAC Use	Yes	19/07/2023
Equity in Healthcare: Be the Change	No	2023
Yes, Your Patient Can Use AAC	No	2023
AAC: You Can (and Should!) Be Into It	No	2023

10.5 Other Continuing Education

Course	Provider	Year
The Role of Oral Musculature in Swallowing & Therapeutic Benefits of IOPI	Appalachian-Zenith	July 2023
IOPI Research Update!	Appalachian-Zenith	July 2023
Data Analysis with R Programming & Google Analytics	Coursera / Google	Jun–Jul 2023
Prevention of Dementia / Understanding Dementia	University of Tasmania	2023 / 2025
Introduction to Programming with MATLAB	Coursera	2023
Anatomy: Human Neuroanatomy	University of Michigan / Coursera	Jun 2022
Voice Disorders: What Patients and Professionals Need to Know	Coursera	Jan 2022

Course	Provider	Year
Influencing People; The Manager's Toolkit	Coursera	2022
Associate Android Developer	[provider to be confirmed]	[year TBC]
Certificate Course in Biostatistics, Epidemiology & Research Methods	[provider to be confirmed]	[year TBC]

11. Teaching Portfolio

11.1 Teaching Philosophy

My teaching philosophy holds that clinical competence is built where sound theory, structured observation, and supervised practice meet. I make the invisible mechanisms of speech, hearing, and swallowing tangible through simulation, instrumentation, and bedside demonstration, and I favour active, technology-enabled learning with continuous formative assessment. I treat mentorship as inseparable from teaching: I expect students to engage directly with data, to question established practice respectfully, and to treat every patient encounter as disciplined inquiry.

11.2 Courses Designed & Delivered (BASLP / M.Sc. SLP)

Code	Course	Syllabus Summary
B1.2	Anatomy & Physiology of Speech-Language Mechanisms	Respiratory, phonatory, resonatory, articulatory, and nervous systems; structure-to-clinic correlation.
B2.1	Neurology for SLP & Audiology	CNS/PNS organisation; cranial nerves; neuroanatomical bases of communication and swallowing.
B2.3	Speech-Language Pathology (core)	Classification, assessment, and management across communication-disorder categories; documentation and ethics.
B3.2	Voice and Voice Disorders	Phonation physiology; instrumental and perceptual voice assessment; behavioural and medical-surgical management.
B4.2	Language Disorders in Children	Typical/atypical development; DLD, ASD, ID; assessment batteries, intervention, AAC.
B6.2	Language Disorders in Adults	Aphasia, RHD, TBI, dementia; differential diagnosis; evidence-based rehabilitation.

11.3 Adaptive & Technology-Enabled Teaching

- Simulation Lab (ACTS-YEN) and Augmented Training & Simulation for anatomy & physiology.
- Clinical-protocol demonstrations (voice prosthesis, electrode placement, electroglottography) in the Simulation Centre.
- Learning Management Software (Yengage), Google Virtual Classrooms, and online assessment (Slido, Google Quiz, SurveyMonkey).
- Faculty Development Programmes (Medical Education Units) — micro-teaching and lesson planning; interactive BenQ-board teaching.

12. Clinical Service Contributions

I maintain an active clinical role spanning the assessment and rehabilitation of voice disorders, neurogenic communication disorders, and dysphagia — including bedside swallowing evaluation for stroke patients and work with head-and-neck-cancer and tracheostomised patients. I integrate instrumental assessment (acoustic and aerodynamic voice analysis, electroglottography, videonystagmography, stabilometry, computerized cranio-corpography, and MoCA-based cognitive screening) into routine practice and model this for students during clinical postings.

My clinical work is deliberately coupled to teaching and research: bedside evaluation doubles as instruction, and recurring clinical questions feed directly into supervised research and into the AI-assisted reporting tools I develop to improve documentation consistency.

13. Grants & Funding History

Year	Grant / Funding	Source
2012–13	Project association — “Servo Control Mechanism in Persons with Stuttering” (JRF)	Dept. of Science & Technology (DST), Govt. of India
04/2013	International Travel Grant — international scientific paper presentation	Dept. of Science & Technology (DST), Govt. of India
2022–23	Course financial-aid awards (MATLAB, R, management, neuroanatomy)	Coursera Financial Aid (approved)

I currently hold no active extramural grant as Principal Investigator — a gap I am addressing through planned submissions in dysphagia profiling and AI-assisted assessment. [Institutional seed-grant / co-investigator funding to be confirmed.]

14. Academic Governance, Editorial & Examination Roles

- Member, Board of Examiners (BOE) — Bengaluru Central University.
- Member, Board of Examiners (BOE) — JIPMER, Puducherry.
- Member, Board of Examiners (BOE) — SDUAHER, Kolar.
- Member, Board of Examiners (BOE) — Mangalore University.
- Member, Board of Studies (BOS) — Yenepoya (Deemed to be University).
- Expert / Inspector — Rehabilitation Council of India (RCI), 2020–21 onwards; RCI Inspector — Nitte Institute of Speech and Hearing (2022).
- Peer-review / editorial-board service: [to be confirmed].

15. Workshops, Outreach & Community Engagement

15.1 Workshops & Events Organised

- SITW.VD 2022 — interdisciplinary workshop on clinical assessment of voice disorders (04/2022).
- World Hearing Day invited talk (03/2022).

15.2 Outreach & Screening Camps

- Free hearing-screening camps for traffic police, Mangaluru (12/2019).
- Free hearing-screening camp for post-COVID-19 persons (09/2022).
- MRPL Industrial Hearing Health Screening Camp (06/2022).
- Public-awareness events on Autism Spectrum Disorders, City Centre Mall, Mangaluru (02/2019).
- Flash-mob event with Firstneuro Hospital on stroke, aphasia, and early identification.
- ARDI Mangaluru Chapter marathon on Alzheimer's Disease, Forum Mall.

15.3 Professional Development Attended

- National workshop on MATLAB, Pune Institute of Computer Technology (8–10 April 2019).
- Faculty Development Programmes (Medical Education Units) — micro-teaching and lesson planning.

16. Awards & Honours

- **International Travel Grant** — Dept. of Science & Technology (DST), Govt. of India (April 2013).
- **Hack 'A' Comm-2026 Innovation Challenge (AIISH, Mysuru)** — innovation entry advancing to formal IP-sharing documentation stage (2026).

17. Professional Affiliations

- Rehabilitation Council of India (RCI) — Registered Practitioner, CRR No. A30294 (since Apr 2013).
- Indian Speech and Hearing Association (ISHA) — Life Member, L-13072161 (since Jun 2013).
- Association of Alumni of AIISH (AAA), Mysuru — Member.
- Dysphagia Research Society (DRS) — Non-Affiliate Member (2021 – present).

18. Skills & Proficiencies

18.1 Clinical & Instrumental

- Voice: acoustic/aerodynamic analysis, electroglottography, Dysphonia Severity Index, voice range profile / phonetography, Praat.
- Dysphagia: bedside evaluation, SAFE protocol, WHO-ICF-based profiling, IOPI oral-musculature assessment.
- Vestibular & balance: VNG, dynamic visual acuity, stabilometry, computerized cranio-corpography, optokinetic after-nystagmus.
- Cognition: MoCA-certified administration; audiology: newborn hearing screening, audiometry, hearing-aid & ear-mould technology.
- AAC: device trials, goal-setting, neuroplasticity-informed intervention (Lingraphica-certified).
- Head & neck / tracheostomy: Passy-Muir speaking-valve evaluation, ICU and end-of-life communication.

18.2 AI, Computing & Data

- AI development: Claude API, Model Context Protocol (MCP), Claude Cowork, Google AI Studio, Gemini Enterprise.
- Deployment: GitHub, Cloudflare, Docker.
- Data & analysis: R, Epi Info, SaTScan, MATLAB (foundational), statistical workflows; HTML, Excel macros, Google Workspace.

18.3 Languages

Language	Proficiency	Clinical Use
Kannada	Native / bilingual	Assessment & therapy
English	Full professional	Teaching, research, clinical
Hindi	Full professional	Assessment & therapy
Telugu	Professional working	Assessment & therapy

19. References

Professional references, including my doctoral mentors and senior departmental colleagues, are available on request. Suggested referees (contact details on request):

Referee	Affiliation	Relationship
Dr. Vijayalakshmi Subramaniam	Dept. of ENT, Yenepoya Medical College Hospital	Doctoral co-mentor / collaborator
Dr. Jayashree Bhat	Visiting Professor, Department of Audiology and Speech Language Pathology, Yenepoya Medical College Hospital, Mangalore	Doctoral mentor
Dr. Mithun	Dept. of Paediatrics, Yenepoya Medical College Hospital	Mentor

Mr. Hemaraja Nayaka S

M.Sc. (SLP), PGDBEME, DHA&ET · Associate Professor · Dept. of Audiology & SLP, YMCH
RCI A30294 · ISHA L-13072161

— End of Curriculum Vitae —