

# Pradeep Balachandran

✉ pbn.tvn@gmail.com

☎ +31 645478161

📍 SMRA-136, Redhappurakkunnu Road, Sasthamangalam, 695010 Thiruvananthapuram, India

## About Me

I serve as a technical consultant in the area of digital health and I'm currently based in the Hague. I have 20 years of work experience, both at the government and the private sector with major involvement in projects related to the design and development of digital health information systems, systems engineering based requirements analysis & specifications preparation, functional / user testing and digital governance process innovation. I am passionate to be an active learner and applied researcher in the field of technology policy assessment for regulatory compliance management within the MedTech & Lifesciences industry. I also have an active interest in performing impact analysis in terms of economic, ecological and social risks/benefits of health technology standards in the society. I sincerely acknowledge my professional mentors and previous employers for their candid motivational feedback given for being a hard working, diligent, and reliable person during my past tenures.

Date of birth: October 19, 1975, Place of birth: New Delhi, India

## Work experience

- 9/2019 - present      **Secretary, Standards Working Group**  
IEEE P2731 Working Group: Standard for a Unified Terminology for Brain-Computer Interfaces  
• India & Hague  
Requirements modeling of BCI unified functional model & BCI data file formats
- 12/2023 - 5/2024      **Research Consultant**  
Johner Institute GmbH • Hague  
Comparative data analysis of EUDAMED, FDA and EU national medical device registries, Estimation of regulatory performance parameters, Creation of analytical reports
- 7/2019 - 5/2023      **Technical Document Editor, Software package driver**  
ITU-WHO Focus Group on Artificial Intelligence for Health (FG-AI4H) • India & Hague  
Development of functional requirement specifications, Technical editor / co-editor for ITU technical documents- DEL 2.2- Good practices for health applications of machine learning: Considerations for manufacturers and regulators, DEL 3.0-AI4H requirement specifications, DEL 5.4- Training and test data specification, Guidance on AI and digital technologies for COVID health emergency & project coordination of Trial Audits 2.0 project on ML4H Algorithm Auditing & Quality Control
- 3/2018 - 6/2021      **Member, Standards Working Group**  
IEEE P1752 OPEN MOBILE HEALTH Working Group • India  
Modeling of clinically valid schema for Physical Activity & Mobility Measures & Defining specifications for mobile health data applications programming interface (API) for interoperability between FHIR and Open mHealth formats
- 2/2020 - 10/2020      **Expert member and case study contributor**  
ITU, UNECE, UN-Habitat -The United for Smart Sustainable Cities (U4SSC) • India  
Authored case study-"Aquaponics for food security" in chapter-4 of "Simple ways to be smart : Guide"
- 11/2015 - 1/2016      **Organizing Member-ICRC Enable Makeathon**  
International Committee of the REDCROSS (ICRC) • India  
Product evaluation criteria design & Technical mentoring during solution proto-typing phase

8/2014 - 10/2015

## Research Associate

Indian Institute of Science, Bangalore • India

Algorithm development for a) SUM-Linear Prediction based Sonorant-Fricative manner classification, b) Speech/ Non-speech classification using higher order moments of Partial Correlation Coefficients, Algorithm validation using TIMIT and NTIMIT data sets & Performance Evaluation of TTS for intelligibility and detection of phonological and co-articulation type of errors

1/2007 - 8/2014

## Senior Engineer/ Scientist-C

Centre for Development of Advanced Computing, Ministry of Electronics & IT • India

A) Project leader for digital health & digital governance projects with responsibilities of Request-for-Proposal preparation, project lifecycle management & quality process management for ISO standard compliance, coordination and supervision of field assessment and application deployment at client facilities  
B) Systems Engineer/ Analyst for digital health projects with responsibilities of functional requirements analysis and software requirements specification preparation, design of high-level system architecture, vetting of test plan & procedures

4/2005 - 9/2006

## Research Engineer & Technical Support Engineer

Voice and speech systems • India

Algorithm development of speech analysis techniques for diagnostic and therapeutic assessment of the speech and hearing impaired & technical support and training of speech analysis tools for ENT physicians, special educators and speech and hearing professionals

5/2000 - 8/2001

## Member of technical staff

Interra Software (India) Pvt. Ltd. • India

Test plan and procedure preparation & Software testing of online analytical processing modules

## Education

---

2022 - 2023

## Master of Science in Public Policy and Human Development

United Nations University (UNU-MERIT) • Netherlands

Governance of Innovation & Technology Policy Assessment

2003 - 2005

## Master of Science (Engineering) in Digital Signal and Image Processing

Coventry University, U.K, (studied at M.S.Ramaiah School of Advanced Studies, Bangalore) • India

1994 - 1999

## Bachelor of Technology in Electrical and Electronics Engineering

University of Kerala • India

## Competencies

---

- Regulatory affairs work including
  - screening data sources (PMS data, regulatory data)
  - performing data analysis ,
  - verifying and documenting regulatory compliance of documents and products
- Functional and user level testing
- Regulatory science work in support of regulatory policy development

## Skill sets

---

Programming Languages:	Python
Analytical Tools:	MS Excel for data analytics, MATLAB
DB Languages:	SQL, MS Excel
Markup languages:	HTML, XML
Version management tool:	Github