

# Udhayakumar Kaithamalai

Subjects: Engineering, Electrical & Electronic

Contributor: Udhayakumar Kaithamalai

Keywords: Research ; Academics ; Collaboration ; Publication ; Outreach

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## Basic Information



**Name:** Udhayakumar Kaithamalai  
(Apr 1977–)

<b>Birth Location:</b>	Uthukuli, India
<b>Title:</b>	Professor
<b>Affiliation:</b>	Anna University
<b>Honor:</b>	Distinguished Alumni EEE 1998, KSR College of Technology, India

## 1. Brief Introduction:

Dr. Udhayakumar Kaithamalai is working as professor in the Department of Electrical and Electronics Engineering, College of Engineering Guindy, Anna University, Chennai, India. Beginning in August 2001, he has held positions at this University in a variety of capacities including Teaching & Research Associate, Lecturer, Senior Lecturer, Assistant Professor, Associate Professor and Professor (currently). He previously worked for almost 1.5 years in 2000-2001 at Kumaraguru College of Technology, Coimbatore, India.

He possesses expertise in a variety of disciplines related to Electrical and Electronics Engineering including Machine Learning and Artificial Intelligence, as well as Control Systems, Smart Sensors, Instrumentation, Power engineering and Micro Electro Mechanical Systems.

A detailed profile of him can be checked from his web page:

<https://sites.google.com/view/udhayakumar-k/home>

## 2. Notable Contributions:

Along the way of his professional career, he has taken on a variety of tasks and responsibilities in the areas of research, administration, extension, and outreach at the departmental and university levels, in addition to his academic responsibilities. From 2014 to 2018, he also worked for 8 years as the deputy director of Anna University's Centre for University and Industry Collaboration, where he worked with numerous businesses to help with CSR projects, skill development, and job placement for university students. These partnerships have benefited more than 15,000 students, both directly and indirectly.

A detailed transcript of his contributions can be found at the following link:

[https://drive.google.com/file/d/1q6Xr2pQVX0oiOKuOjA02od7ATbmFUOVI/view?usp=share\\_link](https://drive.google.com/file/d/1q6Xr2pQVX0oiOKuOjA02od7ATbmFUOVI/view?usp=share_link)

### 3. Principal Publications:

In addition to more than 25 papers in national and international conference proceedings, lecture notes, and editorial book chapters, he has published 28 technical papers in reputable peer-reviewed journals. These publications are referred to and cited by academics all over the world.

Below is a list of some of his articles that are frequently cited:

Speed control of PMBLDC motor using MATLAB/Simulink and effects of load and inertia changes

VM Varatharaju, BL Mathur, K Udhayakumar

2010 International Conference on Mechanical and Electrical Technology, 543-548

MOSFET-like CNFET based logic gate library for low-power application: a comparative study

PAG Sankar, K Udhayakumar

Journal of Semiconductors 35 (7), 075001

Mechanical and electrical properties of single walled carbon nanotubes: a computational study

PAG Sankar, KU Kumar

European Journal of Scientific Research 60 (3), 342-358

Electronic properties of boron and silicon doped (10, 0) zigzag single-walled carbon nanotube upon gas molecular adsorption: a DFT comparative study

K Udhayakumar

Journal of Nanomaterials 2013

Design and Analysis of Two Stage Operational Amplifier Based on Emerging sub-32nm Technology

PAG sankar, K Udhayakumar

IEEE International Conference on Advanced Nanomaterials and Emerging ...

Investigating the Effect of Chirality on Coaxial Carbon Nanotube Field Effect Transistor

PAG sankar and K. Udhayakumar

IEEE International Conference on Computing, Electronics and Electrical ...

An enhanced H-bridge multilevel inverter with reduced THD, conduction, and switching losses using sinusoidal tracking algorithm

A Thiruvengadam

Energies 12 (1), 81

Adaptive controllers for permanent magnet brushless DC motor Drive system using adaptive-network-based fuzzy interference system

VM Varatharaju, B Mathur

American Journal of Applied Sciences 8 (8), 810

A novel carbon nanotube field effect transistor based arithmetic computing circuit for low-power analog signal processing application

PA Gowrisankar, U K

Procedia Technology 12, 154-162

A new multi-level inverter with reduced number of switches based on modified H-bridge

TAK Udhayakumar

International Journal of Power Electronics 10 (s), 49 - 64

A New 23 Level Cascaded Multi-Level Inverter with Optimum Structure

T Sunitha, K Udhayakumar, T Annamalai, C Gopinath

2018 4th International Conference on Electrical Energy Systems (ICEES), 320-327

Rotor position estimation of 6/4 switched reluctance motor using a novel neural network algorithm

MM Beno, L Rajaji, VM Varatharaju, AN Santos

2011 IEEE GCC Conference and Exhibition (GCC), 77-80

A comparative Study with modeling and Simulation of Torque Ripple Reduction Techniques in BLDC Motor

VM Varatharaju, BL Mathur, K Udhayakumar

European Journal of Scientific Research 52 (3), 295-305

An Assessment of Onshore and Offshore Wind Energy Potential in India Using Moth Flame Optimization

LMP Krishnamoorthy R , Udhayakumar K, Kannadasan Raju, Rajvikram Madurai ...

Energies 13 (3063), 1-41

Comparative Analysis of Intelligent Controller Based MPPT for Photovoltaic System with Super Lift Boost Converter

P Manikannan, K Udhayakumar, P Pugazhendiran

Tehnički vjesnik 27 (2), 589-596

Energy efficient reference tracking modified enhanced H-bridge multilevel inverter

T Annamalai, K Udhayakumar, S Anitha, D Pachaikani, P Sasikumar, ...

2019 IEEE 1st International Conference on Energy, Systems and Information ...

Futuristic bigdata framework with optimization techniques for wind energy resource assessment and management in smart grid

R Krishnamoorthy, K Udhayakumar

2021 7th International Conference on Electrical Energy Systems (ICEES), 507-514

## **Further Reading**

[https://www.researchgate.net/profile/Udhayakumar\\_Kaithamalai](https://www.researchgate.net/profile/Udhayakumar_Kaithamalai)

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