

FACULTY PROFILE

VTU FACULTY ID: 2HNCS0009048

Dr.Parashuram Baraki B.E(CS&E),M.Tech(CS&E),Ph.D(CS&E), MISTE

Professor and HOD
Department of CS&E
PDIT, Hosapete

Note: Retain only applicable tables



Objective

To be associated with a progressive organization that provides an opportunity to contribute towards the growth of the organization and also to apply my knowledge and skills in accordance with latest technologies.

Educational Qualifications

1	Ph.D in Computer Science & Engineering from Jain University, Banaglore. Awarded in the year 2017.
2	M.Tech in Computer Science & Engg (Gold Medalist) from VTU in the year 2007.
3	BE in Computer Science & Engineering, from Karnataka University Dharwad in the year 2001.

Professional Details

Total experience: 18 years (Teaching:19 and Industry: Nil)

Proudhadevaraya Institute of Technology, Hosapete (Currently Working)	4 Months
Hirasugar Institute of Technology , Nidasoshi	2 Years 4 Months
Smt.Kamamma Sri Venkappa M Agadi College of Engineering & Technology, Laxmeshwar.	1.5 Years
GM Institute of Technology , Davanagere	12 Years 3 Months
Smt.Giriyamma R Kanthappa Shresthi College of Information & Technology, Harihar	2 Years

Research Work

PhD Guide:

Dr. V. Ramaswamy, Professor and Dean, SRC Sastra University, Kumbakonam, Tamilnadu and Former Principal, Bapuji Institute of Technology, Davanagere, Karnataka.

A Brief Write Up of PhD Work

Title of work: Bio-Metric Authentication System: Innovative Approaches using Dynamic Gestures

Authentication is a process from which a valid user can access services from a system. Providing access to only authenticated persons to use the service is getting tougher nowadays because the intruders

can collect information of the person and based on that they may break the security of the system. Security to a system can be provided using various methods. The types of security system are password based systems such as ATM machines, internet banking etc., physical based security systems such as RFID, Id cards etc. and biometric based systems such as iris recognition, face recognition etc. In password based security system, a user can get access to service if and only if the password matches accurately. Normally a user will set password based on his/her personal information such as birth place, favourite person, lucky number etc. If all these information are collected by an attacker then it is possible to easily bypass the security barrier. In a physical based security system, user will provide information using physical devices such as Bluetooth or any other approved cards but this also poses some kind of insecurity problem and these types of security can easily be stolen by an attacker. In biometric based systems, static information is used while accessing service from a system. There is a chance of stealing the stored database from the attacker. To overcome from these issues, we are attempting an alternate solution in biometric based system using dynamic gestures. The dynamic gestures include occluded faces, segmented faces, mouse patterns, hand gestures and online signatures. In 3D face occlusion, we can authenticate a person even though part of the face is occluded. Segmented part of the face such as eyes, nose and mouth feature are extracted using haar transform which provide higher degree of accuracy in face detection and recognition system. We can authenticate a user based on the dynamic mouse gesture which includes mouse movement and pattern drawn by the user. Dynamic hand gesture authenticates a user using the gestures provided by him/her using an accelerometer. User will be authenticated based on axis, direction and angle of gestures drawn. In dynamic online signature, a user is authenticated based on speed of the signature drawn, pen angle, muscle movement etc. To enhance the level of security, we are combining two authentication systems such as dynamic hand gestures and online signature. User will have access to the system if and only if input of both systems are matched. The results of above modules are generated using MATLAB tool, Visual Studio and OpenCV C++. It is also proved that the approach provides the best results.

Subjects Handled

- | | |
|---|-------------------------------------|
| 1. Computer Concepts and C programming | 2. Data Structure with C |
| 3. Object Oriented Programming | 4. Unix & Shell Programming |
| 5. Discrete Mathematical Structure | 6. Design and Analysis of Algorithm |
| 7. Finite Automata & Formal Languages | 8. Operating System |
| 9. Computer Network | 10. System Software |
| 11. Compiler Design | 12. Computer Graphics |
| 13. Principal of Programming Languages | 14. Data Compression |
| 15. Object Oriented Modeling and Design | 16. System Modeling and Simulation |
| 17. Management & Entrepreneurship for IT Industry | |

Academic Projects Undertaken

- | | |
|---|---|
| 1. Graphical Simulation of Data Structure | 2. Students Information through C. |
| 3. Data Compression. | 4. E-File Manager. |
| 5. G-Mail Notifier. | 6. Radio Frequency Identification (RFID). |
| 7. GPS Based Location Tracking System. | 8. Online data acquisition through mobile/system. |
| 9. i-Care Health Monitoring System. | 10. Smart Traffic Control System. |
| 11. Online Bus pass reservation system | 12. Graphical Based Security for Authentication |

Academic / Research Publications

1	Dr.Parashuram Baraki , et.al, “ Online Insurance Claim Management System ”, A Journal Of Composition Theory , Volume XII , Issue VI, June 2019 , ISSN : 0731-6755, pp 142-147.
2	Dr.Parashuram Baraki , et.al, “ Intelligent Diabetes Disease Prediction Using Data Mining An Innovative Approach Towards Health Monitoring System ”, Journal of Emerging Technologies and Innovative Research (JETIR) Volume 6, Issue 6 June 2019, ISSN-2349-5162, pp 948-952.
3	Dr.Parashuram Baraki , et.al, “ Cluster Based Authentication For Vanet For Improving The Security ”, COMPUSOFT, An international journal of advanced computer technology, 7 (2), February-2018 (Volume-VII, Issue-II), ISSN: 2320-0790,pp 2556-2559.
4	Dr.Parashuram Baraki , et.al, “ Page Rank Analysis - Analysis for Indian Languages ”, International Journal of Pure and Applied Mathematics (IJPAM) Volume 120 No. 6 2018, ISSN: 1314-3395, pp 693-720 (Scopus Indexed Journal)
5	Dr.Parashuram Baraki et.al “ Real Time Weather Analysis Using ThingSpeak ”, International Journal of Pure and Applied Mathematics (IJPAM) Volume 120 No. 6 2018, ISSN: 1314-3395, pp 661-682 (Scopus Indexed Journal)
6	Dr.Parashuram Baraki et.al “ An Innovative Approach for Crop Disease Detection using Image Processing Technique and Pesticide Suggestion for Effective Crop Cultivation ”, Journal of Emerging Technologies and Innovative Research (JETIR) Volume 5, Issue 8 August 2018, ISSN-2349-5162, pp 782-787.
7	Dr.Parashuram Baraki , Dr.V.Ramaswamy, “ Biometric Authentication of a Person using Mouse Gesture Dynamics : An Innovative Approach ” , Advances in Intelligent Systems and Computing Volume 628, Springer 2018 .
8	Parashuram Baraki , Dhanush, “ An Innovative Approach to Authenticate a Person using Combination of Textual and Graphical Image System ” , International Journal for Research and Development in Technology, ISSN 2349-3585, Volume 7, Issue 6, June 2017, pp 150-157.
9	Parashuram Baraki , Dr.V.Ramaswamy, “ Biometric Authentication of a User using Online Dynamic Signature ”, published in IEEE Explore on 27 th April 2017, DOI: 10.1109/ICATCCT.2016.7912066.
10	Parashuram Baraki , Dr.V.Ramaswamy, “ Bio-Metric Authentication of an User using Hand Gesture Recognition ”, International Journal of Applied Engineering Research ISSN 0973-4562 Volume 11, Number 6 (2016) pp 4118-4123 © Research India Publications. (Scopus Indexed Journal)

11	Parashuram Baraki , Dr.V.Ramaswamy, “ Bio-Metric Authentication of a person using Dynamic Gesture ”, IJPT,Dec-2016,Vol. 8, Issue No.4, 23206-23212. ISSN: 0975-766X (Scopus Indexed Journal)
12	Parashuram Baraki , “ An Innovative Approach to Authenticate a Person using Mouse Gesture Dynamics ”, Bonfring International Journal of Software Engineering and Soft Computing, Vol. 6, Special Issue, October 2016, DOI:10.9756/BIJSESC.8271, ISSN 2277-5099.
13	Parashuram Baraki , Dr.V.Ramaswamy, “ Bio-Metric Authentication of a person using Face Segmentation Approach ”, International Journal of Advanced Information Science and Technology (IJAIST) ISSN: 2319:2682 Vol.4, No.7, July 2015. DOI:10.15693/ijaist/2015.v4i7.77-82.
14	Parashuram Baraki , “ Development of an Effective Online Bus Pass Generation System for Transportation Service in Karnataka State ”, (IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 6 (3) , 2015, 3115-3118, ISSN: 0975-9646.
15	Parashuram Baraki , Dr.V.Ramaswamy, “ 3D Face Detection and Recognition under Occlusion ”, (IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 5 (6) , 2014, 7972-7976, ISSN: 0975-9646.
16	Parashuram Baraki , “ Color Image Segmentation By Clustering ”, International Journal of Advanced Research in Computer Science & Technology (IJARCST 2014), ISSN : 2347 - 8446, Vol. 2 Issue 1, Jan-March 2014.

Workshops / Seminars / Conference attended

1	Faculty Development Programme on “ Machine Learning & Data Analytics ” from 08-01-2020 to 11-01-2020 at HSIT, Nidasoshi .
2	Faculty Development Programme on “ Internet of Things and Its Real Time Applications ” from 28-01-2019 to 02-02-2019 at HSIT, Nidasoshi .
3	Faculty Development Programme on “ Data Science and Classification practicing with Python and Matlab ” from 16-07-2018 to 21-07-2018 at JNNCE, Shimogga .
4	Faculty Development Programme on “ NBA- SAR Filling & Preparedness for Assessment ” from 15-09-2017 to 17-09-2017 at HSIT, Nidasoshi .
5	Faculty Development Programme on “ Outcome based education(OBE) & outcome based accreditation ” from 10-02-2017 to 11-02-2017 at GMIT, Davanagere .
6	One day workshop on “ ARM Processor & Its Application ” on 27-12-2016 at GMIT, Davanagere .
7	Faculty Development Programme on “ Accreditation process for Technical Education ” from 26-08-2016 to 27-08-2016 at JSSATE, Bangalore .
8	Faculty Development Programme on “ LATEX ” from 22-07-2016 to 23-07-2016 at GMIT, Davanagere .
9	A training on “ Internal Quality Auditors training ” from 17-12-2015 to 18-12-2015 at SKSVMACET Laxmeshwar .
10	A workshop on “ Research Retreat ” from 31-01-2015 to 01-02-2015 at Jain University Bangalore .
11	A workshop on “ Research Retreat ” from 31-01-2015 to 01-02-2015 at Jain University Bangalore .
12	A workshop on “ Python ” from 22-03-2014 to 23-03-2014 at GMIT,Davanagere .

13	A Workshop on “ Latex on Documentation ” on 09.11.2013 at GMIT, Davanagere
14	A workshop on “ Practitioner Approach on C++ ” on 18.02.2012 at GMIT,Davanagere
15	Faculty Development Programme on “ Information Security and Cyber Forensics ” from 09-02-2012 to 10-02-2012 at CSI, Banagalore.
16	A National Seminar on “ Evolutionary Computing ” from 08.08.2011 to 09.08.2011at Jain University, Banaglore.
17	A one day seminar on “ IBM Think-Explore Evolve(T2E) ” at IBM, India in 2011.
18	A one day seminar on “ Cloud Computing ” at VMWARE, Software India Pvt.Ltd with CSI in 2010.
19	12 th ISTE state level convention & National seminar on “ Evaluating the Evaluators ” from 20.02.2009 to 21.02.2009 at GMIT, Davanagere
20	Faculty enrichment programe on “ Foundational Computer Science courses- An Industry Perspective ” for 15 days at Infosys technologies Bhuvaneshwar.
21	Faculty Development programe on “ Device Driver Development on Multiplatform ” from 10.02.2005 to 11.02.2005 at NMAM Institute of Technology, Nitte.

Awards / Achievements

1	As a HOD of CS&E got NBA Accreditation for 3 years for the department of Computer Science & Engineering, Hirasugar Institute of Technology Nidasoshi from 2018-19 to 2021-22.
2	Secured “ GOLD MEDAL ” from Bapuji Institute of Engineering and Technology, Davangere for having consistent performance in all the semesters marks of Visveswaraya Technological University examination of M.Tech in Computer Science & Engg.
3	Secured Best paper presentation award at National conference held at SRC Kumbakonam Sastra University, TamilNadu on 25 th March 2016.
4	Secured IBM Excellence award for Best Project Guide in 2013.

Responsibilities Held

University level/Other Institutions responsibilities handled:

1. Appointed as **BOE** in CS/IS Board for Visvesvaraya Technological University, Belagavi in 2019.
2. Worked as **BOE** in CS/IS Board for Visvesvaraya Technological University, Belagavi in 2017.
3. **Advisory Board member** for Three Days Faculty Development Program on Web Technology and It's Application at Smt Kamalamma & Sri Venkappa M Agadi College of Engineering & Technology, Lakshmeshwar,
4. **Session- Chair** for National Level Conference on “Advanced in Computer Science & Engineering & Technology(ACSET) 2018 at KLECET , Chikkodi on 9th and 10th March 2018.
5. Attended **BOE's** Meeting and Confidential work held at VTU Belgaum.
6. Worked as **flying squad**, External DCS(Theory), External examiner(Practical) and Valuator for VTU exam.

College level responsibilities handled:

1. **Coordinator** for Six Days Faculty Development Programme on “ Internet of Things and Its Real Time Applications” in Association with **NIT Warangal** from 28.01.2019 to 02.02.2019
2. **Conference Convener** for “International Conference on Recent Innovations in Science Engineering & Technology” (ICRISET-18) during 18th and 19th May 2018 in HSIT, Nidasoshi.
3. **Chief Convener** for National Level Event HSIT QUEST 2018 organized at HSIT Nidasoshi on 21st March 2018.
4. **Dean Academic** for SKSVMACET from 01.09.2015 to 30.06.2016 and also acted as **chief coordinator for NBA work.**
5. **Dean Academic** for GMIT from 01.09.2013 to 19.11.2014.
6. **Coordinator** for conducting two days National level technical fest at GMIT Davanagere in 2014.
7. **Staff Secretary** at GMIT for one year.
8. **Asst. Placement Officer** at GMIT for two years.

Department level responsibilities handled:

1. Head of Department
2. NBA coordinator
3. ISO Coordinator
4. Project Coordinator
5. Time Table Coordinator
6. Academic Coordinator
7. Workshop coordinator

Extra Curriculum Activities

Sports	:	Cricket, Shuttle & Throw-ball
Hobbies	:	Listening to Music, Reading News Papers
Other Information	:	Completed NCC “A” Certificate. Completed “Hindi Pandeeth”, Praveena Examination from Dakshina Bharat Hindi Prachar Sabha, Madras.

Personal Information

Date of Birth	02.06.1979
Gender	Male
Marital status	Married
Languages Known	Kannada, English, Hindi.
Email	parashuram.baraki@gmail.com
Contact detail	Dr. Parashuram Baraki Professor & HOD Department of Computer Science & Engineering Proudhadevaraya Institute of Technology Hospete-583225 , Bellary(Dist), Karnataka Phone-No: 96860 42385 E-mail: parashuram.baraki@gmail.com