Curriculum Vitae

Hemali Pasqual

M.Eng. (Saitama), B.Sc. Eng. (Moratuwa), MIEEE, AMIE(SL), M(SLAAS)

Personal Information

Full name: Hemali Pasqual
Date of Birth: 4th March 1966
Nationality: Sri Lankan
Civil status: Married
Designation: Senior Lecturer – Grade I

Office Address: Department of Electrical & Computer.
                         Engineering,
                         Faculty of Engineering Technology

                         The Open University of Sri Lanka
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                         Colombo – 00500, Sri Lanka.
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Academic & Professional Qualifications

- Master of Engineering [1998] – Saitama University, Japan
  Thesis title: Optical PPM/CDMA System with M-ary Convolutional Coding

- Bachelor of Science in Engineering [1993] - University of Moratuwa
  Field : Electronic and Telecommunication Engineering – Second Class Honours

- Certificate in Teaching in Higher Education – University of Colombo/Staff and
  Educational Development Association (SEDA) – Learning, Teaching and Assessing [2005]

- Member, Institute of Electrical and Electronics Engineers (IEEE) (Membership No.
  95658174)

- Associate Member, The Institution of Engineers, Sri Lanka (Membership No. AM-24397)

- Member, Sri Lanka Association for the advancement of science (SLAAS)

Areas of Specializations
- Optical communications
- Error control Coding
- Embedded Systems
- m-learning based distance education

Training and Workshops participated

- 3G/Long Term Evolution (LTE) and IMS based NGN – Evolution of Standards and Enabling Technologies University of Moratuwa [2010]

- Developing Research competencies – HETC/HRD – Ministry of Higher Education [2011]

- Global Forum of Sri Lankan Scientists – Empowering Sri Lanka through Networking & knowledge Sharing [2011]

- Course Design & Development workshop – SDC/OUSL [2012]

- COL – Workshop on Open Educational Resources – SDC / OUSL [2013]

- Workshop on "Procurement Management" (28th & 29th Nov. 2013) – HETC World Bank project

- Workshop on "Online Collaboration Tools" (07th February 2013) - SDC/OUSL

- Training of Trainers programme on Soft Skills for Personal Development Course – SDC/OUSL 2014

- Staff Training programme for Empowering for Independent Learning – OUSL/ September 2015

- Workshop on "Opportunistic Networks" - University of Moratuwa [2018]

- Workshop on "Network Monitoring" - Lanka Network Operators Group (LKNOG) – November 2018

- Speech Craft program – Toastmasters International/OUSL [2018]

Work Experience

- Senior Lecturer - Department of Electrical & Computer Engineering, Faculty of Engineering Technology, The Open University of Sri Lanka, Nawala, Nugegoda [June 2006 to date]

- Probationary Lecturer - Department of Electrical & Computer Engineering, Faculty of Engineering Technology, The Open University of Sri Lanka, Nawala, Nugegoda [June 2004 to June 2006]

- Temporary Lecturer - Department of Electrical & Computer Engineering, Faculty of Engineering Technology, The Open University of Sri Lanka, Nawala, Nugegoda [January 2003 to June 2004]

- Research Engineer – Arthur C Clarke Centre for Modern Technologies, Katubedda, Moratuwa [January 1994 to June 1995]

- Temporary Instructor - Department of Electronic and Telecommunication Engineering, University of Moratuwa [July 1993 to December 1993]

Current responsibilities

Academic responsibilities

Teaching

Undergraduate Level
- Data Communications (Level 5)
- Optical Communication (Level 4)
- Control Systems Engineering (Level 4)

In the teaching component following duties are covered:

- Curriculum/course development
- Course material writing
- Course material editing
- Conducting Day schools through lectures, discussions, group activities etc.
- Setting, Moderating and Marking of Assignments and Examination papers
- Conducting viva and presentations
- Designing and monitoring Laboratory classes
- Designing and assessing mini projects
- Setting up and maintaining online virtual classes

Other academic responsibilities

- Academic coordinator of Final Year projects (Electronics and Telecommunications)
- Undergraduate and Postgraduate project supervision
- Academic Counseling
- Exam supervision

Other responsibilities at OUSL

- Working Group Leader of the UGC Programme Review 2020 of Faculty of Eng. Technology
- Chairperson/ Working committee on IESL recognition for BTech Honours in Engineering programme From 2019 to date
- Faculty appointed Senate member (2017/2018/2019)
- Member of the team of Institutional review OUSL - 2019
- Served as co-activity coordinator of HETC – QIG grant in the Faculty of Engineering Technology. (from 2012 to date) Here I have been involved in the following activities:
  - Proposal writing
  - Preparing project Implementation plan
  - Providing necessary specifications and procurement procedures
  - Development of interactive multimedia course material for m-learning
- Served as the Chairperson for the FET Student Academic Conference 2015
- Checking the academic details of Degree/Diploma Holders [2012 to date]
- Department representative for Faculty Quality Assurance Committee [2011/2012/2013/2014/2018]
- Department representative for Faculty Research Committee [2015/2016/2017]
- Member of the team appointed for the HETC(Higher Education for the Twentieth Century) World Bank projects
  - University Development Grant [2012/2013]
  - Quality & Innovative Grant [2012/2013/2014/2015]
- Department representative of the Activity Diary committee [2008/9]
- Faculty representative of Bursary Committee [2007/2008/2009]
  - Selection of Mahapola scholarship holders
  - Selection of University Bursary holders
  - Preparation of Faculty guidelines for the selection criteria

Research Publications

Refereed Journal Articles

1. Gunathilaka, T.M.A.U., Fernando, M.S.D., and **Pasqual, H.**, 2018. Individual learning path personalization approach in a virtual learning environment according to the dynamically changing learning styles and knowledge levels of the learner. *International Journal of Advanced and Applied Sciences*, 5(5), pp. 10-19
2. Dissanayake, S.A.D.A.N., **Pasqual, H.** & Athapattu, B.C.L., 2017. Economical colorimetric smart sensor to measure water quality of drinking water in CKDu prevalence areas. *IEEE Sensors Journal*, 17(18), pp. 1558-1748
3. Raj, R. V., **Pasqual, H.**, 2014. Cost effective Fluoride level detector for well water. *Journal of Engineering and Technology of the Open University of Sri Lanka (JET-OUSL)*, 2(1), March 2014, pp. 43 – 50, [ISSN–2279 – 2627]

4. Senarath, I. C., **Pasqual, H.**, 2013. Cost effective Fluoride level detector for well water. *Journal of Engineering and Technology of the Open University of Sri Lanka (JET-OUSL)*, 1(2), September 2013, pp. 31 – 44, [ISSN–2012 – 9912]
5. **Pasqual, H.**, Yashima, H., 1999. Analysis of Optical PPM/CDMA System with M-ary Convolutional Coding, *IEICE Transactions in Communications*. Vol. E82-B No.10, October 1999, pp. 1618-1625
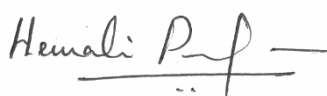
Reviewed Conference papers

1. Gomes, D. K. M. S., **Pasqual, H.**, 2019. Smart stage light control system in broadcasting studios, Proceedings of the 75th Annual Sessions of Sri Lanka Association for the advancement of science, University of Colombo, Sri Lanka, 8 - 13 December 2019
2. Gunathilaka, T.M.A.U., Fernando, M.S.D. and **Pasqual, H.**, 2017. Interactive Mobile Learning Environment for Distance Learning, Proceedings of the 10th Annual International Conference of Education, Research and Innovation (ICERI), Seville, Spain, 16 – 18 November 2017, [ISBN:978-84-697-6957-7]
3. Gangodagamaarachchi, R. P., **Pasqual, H.** and Jayathilake, S., 2017
4. lladam, Tamil Nadu, India, 10-11 February 2017, [ISBN: 978-1-5090-3244-0]
5. Isuranga M.P.U., **Pasqual H.** and Weerakkody N.S., 2017. Smart Electronic Analyzer for Determination of Chicken Meat Spoilage, Transactions – 2017 PART B, Technical Papers of Annual Sessions of The Institution of Engineers, S. Portable Electronic Curd Quality Tester, Proceedings of the 15th Open University Research Sessions - OURS 2017, 16 – 17 November 2017, [ISSN–2012 – 9912]
6. Gunathilaka, T.M.A.U., Fernando, M.S.D. and **Pasqual, H.**, 2017. Identification of the Learning Behavior of the Students for Education Personalization, 2017 International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Pa ri Lanka, pp. 364 – 370.
7. Dissanayake, S.A.D.A.N., **Pasqual, H.** & Athapattu, B.C.L., 2016. Colorimetric Sensor to Detect Fluoride Concentration of Drinking Water Sources, Proceedings of the 110th Annual Sessions of The Institution of Engineers, Sri Lanka, pp: 149 – 154.
8. Dissanayake, S.A.D.A.N., **Pasqual, H.** & Athapattu, B.C.L., 2016. Real-time insitu measurement of selected water quality parameters using an automated colorimeter, Proceedings of the 5th International Symposium on Water Quality and Human Health: Challenges Ahead, PGIS Peradeniya Sri Lanka, 5 – 6 August 2016, pp. 1 – 2.
9. Dissanayake, S.A.D.A.N., **Pasqual, H.** and Athapattu, B.C.L., 2015. Detection of concentrations in drinking water wells of rural villages in Sri Lanka using remotely sensed fluoride detector, The 4th International GIGAKU Conference (ICGN2015), Nagaoka, Japan, 19 – 21 June 2015
10. Dissanayake, S.A.D.A.N., **Pasqual, H.** and Athapattu, B.C.L., 2015. Automated Mechanism to detect Glyphosate in Well Water, Proceedings of the 71st Annual Sessions of Sri Lanka Association for the advancement of science, University of Sri Jayawardhanapura, Sri Lanka, 2 - 4 December 2015
11. De Silva, G. A., **Pasqual, H.**, 2014. Data acquisition and measuring device for quality testing of well water, Proceedings of the 70th Annual Sessions of Sri Lanka Association for the advancement of science, 01– 05 December 2014

12. Sendanayake, L. T., **Pasqual, H.**, 2014. RFID handheld reader for library use, Proceedings of the 70th Annual Sessions of Sri Lanka Association for the advancement of science, 01– 05 December 2014
13. Anthonys, G., **Pasqual, H.** and Sriyananda, H., 2007. Implementation of Fuzzy Controller for an Air Conditioning System, Proceedings of the 4th Annual Sessions of Sri Lanka Association for Artificial Intelligence, University of Moratuwa, Sri Lanka, 31st October 2007, pp. 4-9
14. **Pasqual, H.**, Yashima, H. and Suzuki, J., 1998. Analysis of Optical PPM/CDMA System with M-ary Convolutional Coding (Stage II), Proceeding of International Symposium on Information Theory and its Applications (ISITA), October 1998, Mexico-City, Mexico. pp. 518-521
15. **Pasqual, H.**, Yashima, H., 1998. Analysis of Optical PPM/CDMA system with M-ary Convolutional Coding (stage I), Proceedings in IEICE Society conference, Japan, September 1998.

Research Supervision

- Co-supervisor: MPhil student, Registered with The Dept. of Electrical & Computer Engineering, OUSL with the title "Interactive and Personalized M learning Environment for Knowledge Enhancing among Students" (2019)

- Co-supervisor: MPhil awarded in 2016 for the thesis "Design and Development of an in-situ device to detect selected potable water quality parameters associated with CKDu in Sri Lanka

- Supervisor MTech research project awarded in 2011 for the thesis " Improving Service Quality of Wire Line Services" Dept. of Mechanical Engineering

- Supervisor MTech research project awarded in 2010 for the thesis "Analysis of Broadband Access Product Profitability" Dept. of Mechanical Engineering.

- Have been supervising undergraduate Final Year Project students (both individual and group projects) since 2003 in the areas of embedded systems, optical communication and wireless communication projects

I do hereby certify that the above mentioned particulars are to the best of my knowledge, true & correct.

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