

Curriculum Vitae of Dr. Surendra Thakur (Abridged CV)

D. TECH(ICT) M. TECH(ICT)

Career Profile & Employment Details

1. e-Skills Co-Lab Director (2011-Present)

• Core functions/Responsibilities:

- This Research Hub forms part of a broader national project aimed at e-Skilling the Nation.
- This Co-Lab excels as a thought leader in e-skills for essential service delivery by:
 - Creating programmes and courses that empower government and society
 - Creating and teaching e-skills programmes that leverage technology and artefact creation (such as Software Development)
- The Co-Lab delivers high quality Research Outputs through Conference Proceedings and Journal Publications.
- The Co-Lab holds an artefact for automatic degree authentication which in spite of direct interest by the Deputy Minister of Higher Education has not (yet) got traction.

2. Director and Head: Enterprise Development Unit (EDU) at Durban University of Technology (2009: present) (although seconded to e-skills)

• Core functions/Responsibilities:

- This unit is **SELF-FUNDED** and reports to the Deputy Vice Chancellor (Technology Innovation & Partnerships).
- Responsible for the commercialisation of viable technology projects, third stream income generation and the facilitation of Industry Partnerships.
- Develops Quality Management systems to manage SETA accredited Short Courses.
- Preparing proposals, managing budgets and staff.
- Core functions also include: patent registration, technology transfer, short course development, managing research projects, incubation of innovations and SMME development.

3. Founder, Chairman and Director: InvoTech SEDA Technology Incubator: (2011-present)

• Core Functions/ Responsibilities:

- This is a registered NPO Innovation Incubator which assists innovators to conceptualize ideas, develop prototypes and commercialize models. In the first 18 months of our existence we had 104 projects.
- Funding of about 3m (and 5m from TIA per annum **all of which** goes to clients)

4. Associate Director: Department Of Information Technology (Durban University Of Technology) August 1997- July 2008

• Core Functions/Responsibilities:

- Introduced the new B-Tech (IT) syllabus upon appointment.
- Led curriculum development and mentored junior staff and students.
- Acted as Head of department for various periods once for 6 months with a staff complement of 60 and a budget of over R30m with over a 1000 computers during that time.

5. Executive Management Roles:

- Institution of the Senate, Durban University of Technology
- Higher Education ICT Association (HEICTA) (1998-2009)
- ICASA Complaints and Compliance Committee (CCC) (2007- 2009)
- ICTE Provincial Advisory Committee (2009)

Research and Academic Work

1. Commissioned Research

- **IEC Commissioned Researcher (2010-12) “e-voting – the cross national experience.”**
 - Commissioned in 2010 to undertake an international cross-border study of electronic voting. This report was delivered in March to the IEC. (Presented to government on 11-12 March 2013)
 - This resulted in 6 keynote expert-level conference addresses viz.
 - Software Quality Conference Johannesburg (November, 2010),
 - UNDP Conference in Accra (June, 2011)
 - EISA EMB conference Nairobi (November, 2011)
 - IEEE e-democracy conference in Pretoria (October, 2012),
 - W3W-ZA Conference (November 2012)
 - IEC e-voting Seminar (March, 2013).
 - **UNDP Commissioned Research 2012-13**
 - International study for electronic voter registration entitled “*The path towards effective solutions: A study on voter registration experiences and technology*”. The UNDP spent USD 1.2 billion over 12 years in this area.
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2. Post-Masters Research

- Millham, R., Thakur, S. “Social Media and Big Data” in Human Element of Big Data, Taylor and Francis, London, 2016
 - Thakur, S. Millham, R., and Tshidzumba, A.N. “e-citizenship: a panacea for citizen driven services? International Conference on Public Participation”, Durban International Conference on Public Participation, ICC Durban 18-19 February 2016.
 - Thakur, S., E. Adetiba, O. Olugbara and R. Millham” Experimentation Using Short-Term Spectral Features for Secure Mobile Internet Voting Authentication,” Mathematical Problems in Engineering Journal, Hindawi Publishers, 2016
 - Thakur, S., 2014 “E-Voting: India and the Philippines- A Comparative Analysis for Possible Adaption in Africa, Emerging Issues and Prospects in African E-Government, Sodhi, I.S (ed.), pp.28-55.
 - Thakur, S., Olugbara, O.O., Millham, R., Wesso, H.W. and Sharif, M., 2014, October “Transforming voting paradigm—the shift from inline through online to mobile voting.” In Adaptive Science & Technology (ICAST), 2014 IEEE 6th International Conference on (pp. 1-7). IEEE. (**Best Paper award**)
 - Millham, R., Thakur, S. and Malan, C., 2014, April. Does self-regulating e-learning assist in secondary school preparation for engineering education? In American Society for Engineering Education (ASEE Zone 1), 2014 Zone 1 Conference Paper (pp. 1-5). IEEE.
 - Maphephe, J., Balkaran, R. and Thakur, S. 2014. Digital and interactive content production as part of Lesotho strategic development – a brief study on Lesotho working towards national collaboration for updated civil register and voter register in the spirit of improved service delivery, African journal of computing and ICT, (7)4: 85-90, IEEE.
 - Maphephe, J.; Balkaran, R. and Thakur, S. 2014. Impact of information and communication technology presence on direct parliament debates and security of the future laws of Mountain Kingdom of Lesotho. Computing, Information Systems, Development Informatics & Allied Research - A Multidisciplinary Journal. 5(3): 29-44.
 - Thakur, S and Dávila, R. The path towards effective solutions: A study on voter registration experiences and technology. Commissioned research. UNDP. 2013.
 - IEC. 2014. Electronic voting, an enabler or disabler to strengthening electoral democracy? In: Seminar on Electronic Voting and Counting Technologies. Cape Town, South Africa, 12 March 2013, 1-20.
 - Thakur, S. and Singh, S. 2012. A study of some e-government activities in South Africa. In: 2012 e-Leadership conference on sustainable e-Government and e-business innovations (E-LEADERSHIP). IEEE, 1-11.
 - Thakur S. 2012. Electronic Voting: The Cross -National experience. Commissioned Research. Electoral Commission. Pretoria.
 - Thakur, S. and Boateng, R. 2011. E-voting for good governance and a green world, In: Proceedings of the Africa Digital Week. July 25-29 2011. Accra, Ghana: African Institute of Development Informatics and Policy, 55-62.
 - Olugbara, O., R. Millham, D. Heukelman, S. Thakur, H. Wesso, and M. Sharif (2014) “Determining e-Skills Interventions to Improve the Effectiveness of Service Delivery by Community Development Workers”, E-Skills Conference, Informing Science, Cape Town.
 - Millham, R, S Thakur, (2014) “Evaluating the Effectiveness of ELearning and Core Skills Interventions for South African Secondary School Learners”, E-Skills Conference, Informing Science, Cape Town.
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3. Post Graduate Supervision (Current)

- **Masters Students**
 - Peters, W. Is Internet spawning Digital Narcissism? A case study of KZN Digital Millennials?
 - Peters, C. When the Ink runs dry. The future of the print industry in KZN.
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- Goldstone, W. Job dissatisfaction, labour turn-over and a lack of motivation at a Durban-based Business Process Outsource Company.
- David, K. The effectiveness of Non-Linear Interactive Information Graphics for online newspapers: A case study.

- **PHD Students**

- Maphehpe, J. Internet based Voting.
- Naidu, G. Business Improvement Methodologies For Communication In The Services Group Of Information Communication And Technology Companies In Africa.