

## Personal Data:

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## Education:

**1990-1993      Ph.D.**

Department of Electronics and Electrical Engineering

University of Glasgow – Scotland

**1986-1987      M.Sc. in Telecommunications and Information Systems**

Department of Electronics and Electrical Engineering

University of Essex – England

**1979-1984      B.Sc. Honours in Electrical Engineering, *First Class***

Department of Electrical Engineering

University of Khartoum – Sudan

## Memberships:

*Member*, Institution of Engineering & Technology (IET) (UK)

Chartered Engineer, 1998

*Senior Member*

Institute of Electronics & Electrical Engineers (USA)

Member, Electron Devices Society, IEEE

Full Member 1996, Senior Member 2001

## Research Interests:

## Electronic devices and systems

- Single-electron tunnelling systems.

## Physics and applications of Nano-electronic quantum devices & systems

### Publications:

- Journals
- Conference Papers

### Journals:

S. Babiker and Rania Naeem, "Noise suppression in single electron transistor", submitted for publication in (Journal) *IEEE Trans. on Nanotechnology*, August 2012.

[2] S. Babiker, "Shot Noise in Resistively Coupled Single Tunnel Junctions", submitted for publication in (Journal) *Solid State Electronics*, August 2012.

[3] S. Babiker, Alaeldin A. Ahmed and Mustafa A. A. Yasin, "Web Navigation Tool for Visually Impaired People", *International Journal of Information Technology and Web Engineering (IJITWE)*, 7(1), 33-47, 2012 33. ISSN 1554-1045, DOI: 10.4018/jitwe.2012010103.

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[5] S. Babiker, Rania Naeem and A. Bedri, "Identification of States and Events for the Static and Dynamic Simulation of Single Electron Tunneling Circuits", *International Journal of Electronics and Electrical Engineering vol.6*, pp. 1485-1489, 2011.

[6] S. Babikir, Liena Elrayah Abdel-Khair, Samah Makawi Elbasheer, "Microcontroller based Heart Rate Monitor using Fingertip Sensors", *Engineering Journal*, vol 2, 2012.

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*Semiconductor Structures*“, eds. M. Balkanski, Kluwer Academic Publishers, 1996.

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## Conference Papers:

Abdulrahman Nasereldin Bilal, Mohamed Siddig Altyeb & S. Babiker, "Computer Vision Targeting & Tracking Smart Security System", submitted (August 2012) for publication in *IEEE Conference on Research and Development (IEEE-SCORED)*, Malaysia, Dec 2012.

[2] Alaelain A Ahmed Mustafa Abdel Haleem A Yasin & Sharief F. Babiker, "Tactile Web Navigator Device for Blind and Visually Impaired People", *Proc of IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT)*, pp. 1-5, 2011.

[3] S. Babiker & Rania Naeem, "Study of Noise in Double and Triple Tunnel Junction Systems", *Proc. of UofK Annual Conf. Of Postgraduate Studies and Scientific Research, Basic Sciences and Engineering Studies Conference*, 17-20 Feb, 2012.

[4] Shiemaa Sidahmed Awad, Tasneem Ibrahim Abdalla and Sharief F. Babiker "Transmission of Real-Time Clinical Diagnostic Signals over the SGM Network", *Proc of IEEE Conference on Research and Development (IEEE-SCORED)*, Malaysia, pp. 134-137, 2011 DOI: 10.1109/SCORED.2011.6148722

[5] Mustafa Abdel Haleem Ahmed Yasin, Alaelain Abdel Mageed Ahmed & Sharief F. Babiker, "A Novel Tactile Web Navigator Device", *Proc. of UofK Annual Conf. Of Postgraduate Studies and Scientific Research, Basic Sciences and Engineering Studies Conference*, 17-20 Feb, 2012.

[6] Shiemaa Sidahmed Awad, Tasneem Ibrahim Abdalla & Sharief F. Babiker, "Transmission of ECG Signal over GSM Network", *Proc. of UofK Annual Conf. Of Postgraduate Studies and Scientific Research, Basic Sciences and Engineering Studies Conference*, 17-20 Feb, 2012.

[7] Mohammed Abdelrahman Ali, Omer Salah Ahmed, Abdelkareem Bedri & Sharief F. Babiker, "Towards an Educational Computer Architecture for the University of Khartoum", *Proc. of UofK Annual Conf. Of Postgraduate Studies and Scientific Research, Basic Sciences and Engineering Studies Conference*, 17-20 Feb, 2012.

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