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| **Roman Genov** | | | | |
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| The Edward S. Rogers Sr.  Department of Electrical and Computer Engineering  10 King's College Road  Toronto, Ontario M5S 3G4 Canada | | *URL*: http://www.eecg.utoronto.ca/~roman  *Email*: roman@eecg.utoronto.ca  *Phone*: (416) 946-8666  *Fax*: (416) 971-2286 | | |
| EDUCATION | | | | |
|  | **The Johns Hopkins University**, Ph.D., Electrical and Computer Engineering,Baltimore, MD, 8/2002.  Dissertation: Massively Parallel Mixed-Signal VLSI Kernel Machines.  Advisor: Gert Cauwenberghs  **Massachusetts Institute of Technology**, Visiting Student, AI Lab/CBCL, Cambridge, MA, 1/1999-8/1999.  **The Johns Hopkins University**, M.S.E., Electrical and Computer Engineering, Baltimore, MD, 1998.  GPA 4.00/4.00  **Rochester Institute of Technology**, B.S., Electrical Engineering, Rochester,NY, 1996.  GPA 4.00/4.00 | | | |
| ACADEMIC AND INDUSTRIAL POSITIONS | | | | |
|  | **University of Toronto,** Toronto, ON, 7/2008-Present.  *Associate Professor*, Electronics Group, Department of Electrical and Computer Engineering.  **University of Toronto,** Toronto, ON, 9/2002-6/2008.  *Assistant Professor*, Electronics Group, Department of Electrical and Computer Engineering.  **The Johns Hopkins University**, Baltimore, MD, 9/96-8/2002.  *Research Assistant*, Adaptive Microsystems Lab, Department of Electrical and Computer Engineering.  **Swiss Federal Institute of Technology (EPFL)**, Lausanne, Switzerland, 6/1998-7/1998.  *Visiting Researcher*, Autonomous Systems Lab.  **Xerox Corporation**, Webster, NY,3/1996-8/1996.  *Design Engineer CO-OP*, Advanced Development Team in the Color Imaging Systems Division.  **Atmel Corporation**, Columbia, MD, 6/1995-12/1995.  *Design Engineer Intern*, Chesapeake Design Center. | | | |
| AWARDS AND HONORS | | | | |
|  | The MEMSCAP Microsystems Design Award (with A. Bagheri and S. Gabran, prize $3,000), 2012.  Brian L. Barge Award for Excellence in Microsystems Integration (with H. Kassiri and N. Soltani, prize $3,500), 2012.  Best Paper Award at IEEE Biomedical Circuits and Systems Conference, BioCAS (with H. Jafari, the best paper overall, 199 submitted papers), 2011.  Best Student Paper Award nomination at IEEE Biomedical Circuits and Systems Conference, BioCAS (with K. Abdelhalim, top seven student papers), 2010.  AMD/CICC Student Scholarship Award at IEEE Custom Integrated Circuits Conference, CICC (with M. Nazari, one of the highest ranked student papers, $200 prize), 2010.  Best Student Paper Award, IEEE International Symposium on Circuits and Systems, ISCAS (with A. Nilchi, $400 prize, 783 regular papers), 2009.  Best Paper Award, by Sensory Systems Technical Committee of IEEE Circuits and Systems Society, IEEE International Symposium on Circuits and Systems, ISCAS (the top paper), 2009.  Best Student Paper Contest Finalist, IEEE International Symposium on Circuits and Systems (with F. Shahrokhi, top 9 student papers out of 783 regular papers), ISCAS 2009.  Undergraduate Teaching Award for teaching excellence, University of Toronto Students Union (five awards across the university), 2008-2009.  Brian L. Barge Award for Excellence in Microsystems Integration (with H. Jafari, $3,500 prize), 2008.  DALSA Corporation Award for excellence in microsystems innovation (with A. Olyaei, $3,000 prize), 2006 and (with K. Abdelhalim, $3,000 prize) 2009.  Canadian Institutes of Health Research (CIHR)/BioContact Next Generation Award (with M. Derchansky and two others, $2,000 prize), 2005.  Associate Editor:  IEEE Transactions on Biomedical Circuits and Systems, 2006-present.  IEEE Transactions on Circuits and Systems-II: Express Briefs, 2010-2012.  IEEE Signal Processing Letters, 2008-2010. | | | |
| RESEARCH GRANTS AND CONTRACTS Annual Total | | | | |
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|  | “Fully Implantable Wireless Multi-Electrode ECoG Monitoring Systems,” PI (25%), with 2 Co-PIs, Natural Sciences and Engineering Council of Canada, Collaborative Health Research Projects, 4/2012-3/2015.  “A Low-cost, Compact Spectral Imaging Microsystem for Rapid, Regenerative and Highly Selective Nucleic Acid Detection,” PI (25%), with 3 Co-PIs, Natural Sciences and Engineering Council of Canada, Strategic Projects, 10/2010-09/2013.  “Micromachined Electrodes and Integrated Circuits for Implantable Cortical Brain Interfaces,” PI, with 3 Co-PIs, Natural Sciences and Engineering Council of Canada, Strategic Projects, 10/2009-09/2012  “Intelligent Sensory Integrated Systems,” PI, New Opportunities Award, Canada Foundation for Innovation (CFI), 11/2005-3/2008.  “Intelligent Sensory Integrated Systems,” PI, Ontario Research Fund, 11/2005-3/2008. | | $60,833  $75,150  $78,240  $33,408  $33,408 | $182,500  $225,450  $234,720    $100,226  $100,226 |

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| PUBLICATIONS TOTAL COUNT: 79 | |
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| SELECTED JOURNAL PUBLICATIONS | |
|  | [1] M. Nazari, H. Jafari, L. Leng, A. Guenther, R. Genov, “CMOS Neurotransmitter Microarray: 96-Channel Integrated Potentiostat with On-die Microsensors,” to appear *IEEE Transactions on Biomedical Circuits and Systems*, 2012. **(Also invited to special section of IEEE TCAS-I on best IEEE CICC’10 papers)**  [2] K. Abdelhalim, V. Smolyakov, R. Genov, “A Phase-Synchronization Epileptic Seizure Detector VLSI Architecture,” *IEEE Transactions on Biomedical Circuits and Systems,* 2011.**(Special issue on best IEEE BioCAS’10 Conference papers, invited)**  [3] F. Shahrokhi, K. Abdelhalim, D. Serletis, P. Carlen, R. Genov, “128-Channel Fully Differential Digital Integrated Neural Recording and Stimulation Interface,” *IEEE Transactions on Biomedical Circuits and Systems,* Vol. 4, No. 3, pp. 149-161, June 2010.**(Special issue on best IEEE ISCAS’09 papers, invited)**  [4] J. Aziz, K. Abdelhalim, R. Shulyzki, R. Genov, B. Bardakjian, M. Derchansky, D. Serletis, P. Carlen, “256-Channel Neural Recording and Delta Compression Microsystem with 3D Electrodes,” *IEEE Journal of Solid-State Circuits,* Vol. 44, No. 3, pp. 995-1005, March2009.  [5] J. Aziz, R. Genov, B. Bardakjian, M. Derchansky, P. Carlen, “Brain-Silicon Interface for High-Resolution In Vitro Neural Recording,” *IEEE Transactions on Biomedical Circuits and Systems*, Vol. 1, No. 1, pp. 56-62, March 2007. |