2018 IEEE Biomedical Circuits and Systems Conference (BioCAS 2018)

Cleveland, Ohio, USA
17-19 October 2018
# Table of Contents

2018 IEEE BIOMEDICAL CIRCUITS AND SYSTEMS CONFERENCE (BIOCAS) .............................................................. II

WELCOME MESSAGE FROM THE GENERAL CHAIR ............................................................................................. IV

WELCOME MESSAGE FROM THE TECHNICAL PROGRAM COMMITTEE .......................................................... V

PROGRAM AT A GLANCE ....................................................................................................................................... VI

GENERAL INFORMATION ........................................................................................................................................ IX

SOCIAL PROGRAM ................................................................................................................................................ X

CONFERENCE VENUE MAP .................................................................................................................................. XII

CONFERENCE APP - WHOVA .............................................................................................................................. XIII

IEEE BIOCAS 2018 COMMITTEE ............................................................................................................................... XIV

IEEE BIOCAS 2018 SESSION CHAIRS ................................................................................................................ XV

IEEE CIRCUITS AND SYSTEMS SOCIETY OFFICERS ....................................................................................... XVI

IEEE ENGINEERING IN MEDICINE AND BIOLOGY SOCIETY OFFICERS ....................................................... XVII

CONFERENCE SPONSORS ..................................................................................................................................... XIX

PATRONS & EXHIBITORS .................................................................................................................................... XX

KEYNOTE SPEAKERS ............................................................................................................................................. XXI

TUTORIAL SPEAKERS ........................................................................................................................................... XXIII

BIOCAS 2018 – WEDNESDAY, OCTOBER 17TH .................................................................................................. XXV

BIOCAS 2018 – THURSDAY, OCTOBER 18TH .................................................................................................... XXX

BIOCAS 2018 - FRIDAY, OCTOBER 19TH ........................................................................................................ XXXV
BioCAS 2018 – WEDNESDAY, OCTOBER 17TH

9:30 – 10:30
POSTER SESSION: A1P-B - Assistive, Rehabilitation & Quality of Life Technologies AND A1P-C - Biosensors & Interface Circuits I
Room: Salon ABC
Chairs: Sameer Sonkusale and Vasiliki Giagka

Muscle Synergy Adaptation during a Complex Postural Stabilization Task .................................................................1
Rajat Singh, Kamran Iqbal, Gannon White
University of Arkansas at Little Rock, United States

Flex Force Smart Glove Prototype for Physical Therapy Rehabilitation ..........................................................5
Lloyd Emokpae, Roland Emokpae Jr., Brady Emokpae
Lasarrus Clinic and Research Center, United States

Smart Prosthesis System: Continuous Automatic Prosthesis Fitting Adjustment and Real-Time Stress Visualization .................................................................691
Yi Cai{1}, Jia Chen{1}, Diliang Chen{1}, Guanzhou Qu{1}, Hongping Zhao{2}, Rahila Ansari{3}, Ming-Chun Huang{1}
{1}Case Western Reserve University, United States; {2}Ohio State University, United States; {3}V.A. Medical Center, United States

Towards Phoneme Landmarks Identification for American-English Using a Multimodal Speech Capture System .................................................................9
Nordine Sebkhi{1}, Yana Yunusova{2}, Maysam Ghovanloo{1}
{1}Georgia Institute of Technology, United States; {2}University of Toronto, Canada

Preliminary Test of a Wireless Magnetic Tongue Tracking System for Silent Speech Interface ........................................13
Myungjong Kim{2}, Nordine Sebkhi{1}, Beiming Cao{2}, Maysam Ghovanloo{1}, Jun Wang{2}
{1}Georgia Institute of Technology, United States; {2}University of Texas at Dallas, United States

A Mixed-Reality Training Environment for Upper Limb Prosthesis Control .................................................................17
Avinash Sharma{2}, Christopher Hunt{2}, Asheesh Maheshwari{5}, Luke Osborn{2}, György Lévay{1}, Rahul Kaliki{1}, Alcimar Soares{4}, Nitish V. Thakor{3}
{1}Infinite Biomedical Technologies, LLC, United States; {2}Johns Hopkins University, United States; {3}Johns Hopkins University / Singapore Institute for Neurotechnology, National University of Singapore, Singapore; {4}Universidade Federal de Uberlândia, Brazil; {5}Indian Institute of Technology Bombay, India

Standalone Assistive System to Employ Multiple Remaining Abilities in People with Tetraplegia ........................................21
Md Nazmus Sahadat, Nordine Sebkhi, Fanpeng Kong, Maysam Ghovanloo
Georgia Institute of Technology, United States

Predicting Intention Through Eye Gaze Patterns .................................................................25
Fatemeh Koochaki, Laleh Najafizadeh
Rutgers University, United States

Predictive Trajectory Estimation During Rehabilitative Tasks in Augmented Reality Using Inertial Sensors ........29
Christopher Hunt{2}, Avinash Sharma{2}, Luke Osborn{2}, Rahul Kaliki{1}, Nitish V. Thakor{3}
{1}Infinite Biomedical Technologies, LLC, United States; {2}Johns Hopkins University, United States; {3}Johns Hopkins University / Singapore Institute for Neurotechnology, National University of Singapore, Singapore, United States

Slip Suppression in Prosthetic Hands Using a Reflective Optical Sensor and MPI Controller ...........................................33
Andrei Nakagawa-Silva{5}, Sai Praneeth Reddy Sunkesula{1}, Anna Prach{3}, John-John Cabibihan{4}, Nitish V. Thakor{2}, Alcimar Soares{5}
{1}Indian Institute of Technology Bombay, India; {2}Johns Hopkins University / Singapore Institute for Neurotechnology, National University of Singapore, Singapore; {3}Middle East Technical University, Turkey; {4}Qatar University, Qatar; {5}Universidade Federal de Uberlândia, Brazil

Highly-Stretchable Biomechanical Strain Sensor Using Printed Liquid Metal Paste ..................................................37
Callen Votzke, Uranbileg Daalkhaijav, Yigit Mengüç, Matthew Johnston
Oregon State University, United States
Enabling Communication for Locked-in Syndrome Patients Using Deep Learning and an Emoji-Based Brain Computer Interface ......................................................... 41
Alexandra Comaniciu{1}, Laleh Najafizadeh{2}
{1}Lawrenceville School, United States; {2}Rutgers University, United States

Energy-Optimal Gesture Recognition Using Self-Powered Wearable Devices ............................................................... 45
Jaehyun Park{3}, Ganapati Bhat{1}, Cemil Geiyik{1}, Hyung Gyu Lee{2}, Umit Ogras{1}
{1}Arizona State University, United States; {2}Daegu University, Korea; {3}University of Ulsan, Korea

A Low Distortion Continuous Time Sigma Delta Modulator Using a High Input Impedance Instrumentation Amplifier for Neural Recording ................................ 49
Antonios Nikas{1}, Sreenivas Jambunathan{1}, Leonhard Klein{1}, Matthias Voelker{1}, Maurits Ortmanns{2}
{1}Fraunhofer Institute for Integrated Circuits, Germany; {2}Universitat Ulm, Germany

A 0.5V PPG-Based Heart Rate and Variability Detection System .............................................................................. 53
Wala Saadah, Shah Zaib Aslam, Aminah Hina, Fakeha Asghar
Lahore University of Management Sciences, Pakistan

Gaussian Monocycle Pulse Generator with Calibration Circuit for Breast Cancer Detection ...................................... 57
Yoshihiro Masui{2}, Akihiro Toya{3}, Mitsutoshi Sugawara{4}, Tomoaki Maeda{1}, Masahiro Ono{1}, Yoshitaka Murasaka{1}, Atsushi Iwata{1}, Takamaro Kikkawa{4}
{1}A-R-Tec Corporation, Japan; {2}Hiroshima Institute of Technology, Japan; {3}National Institute of Technology, Kure College, Japan; {4}Research Institute for Nanodevice and Bio Systems, Hiroshima University, Japan

A Low-Power Low-Noise Biomedical Instrumentation Amplifier Using Novel Ripple-Reduction Technique ........ 61
Yizhao Zhou, Menglian Zhao, Yangtao Dong, Xiaobo Wu, Lihan Tang
Zhejiang University, China

Low-Power, Low-Noise Epileptic-Seizure Detection System with High Accuracy Using EEG Signals ..................... N/A
Mohammad Tohidi, Jens Kargaard Madsen, Farshad Moradi
Aarhus University, Denmark

Trapped Charge Cancellation for CMOS ISFET Sensors via Direct Tunnelling .......................................................... 69
Yuanqi Hu{1}, Pantelis Georgiou{2}
{1}Beihang University, China; {2}Imperial College London, United Kingdom

A Fully-Digital ISFET Front-End with in-Pixel \[\Sigma \Delta\] Modulation ........................................................................... 73
Miguel Cacho-Soblechero{1}, Tor Sverre Lande{2}, Pantelis Georgiou{1}
{1}Imperial College London, United Kingdom; {2}University of Oslo, Norway

Direct Digital Wavelet Synthesis for Embedded Biomedical Microsystems ............................................................... 77
Lieuwe Leene, Timothy G. Constantindou
Imperial College London, United Kingdom

Monolithic CMOS-Based Neurotransmitter Detector for 1024-ch Simultaneous Recordings .................................. 81
Kevin White, Geoffrey Mulberry, Matthew Crocker, Brian Kim, Jonhui Smith, Kiminobu Sugaya
University of Central Florida, United States

Bootstrapped Non-Inverting Front-End Amplifier for Capacitive Electrocardiogram Measurement ..................... 85
Hajime Nakamura, Akinori Ueno
Tokyo Denki University, Japan

16:00 – 17:00
POSTER SESSION: A2P-B. Biomedical Imaging & Image Processing AND A2P-C. Body Area/Sensor Networks & Wireless/Wearable Health Monitoring
Room: Salon ABC
Chairs: Maurizio Valle and Konstantin Nikolic

A Portable Thermogram Based Non-Contact Non-Invasive Early Breast-Cancer Screening Device .................. 89
Bilal Majeed, Hafiz Talha Iqbal, Uzair Khan, Muhammad Awais Bin Altaf
Lahore University of Management Sciences, Pakistan
The Spectral Calibration of Swept-Source Optical Coherence Tomography Systems
Using Unscented Kalman Filter ................................................................. 93
Amir Tofighi Zavareh, Sebastian Hoyos
Texas A&M University, United States

Multi-level Interpolation for Feature-Based Motion Correction in Neurosurgery .................................................. 97
Fang Chen, Jan Müller, Jens Müller, Elisa Bohl, Nico Hoffmann, Matthias Kirsch, Ronald Tetzlaff
Technische Universität Dresden, Germany

Lung Nodule Segmentation Using Pleural Wall Shape ................................................................. 101
Yunfei Li, Xiang Xie, Guolin Li, Zhihua Wang
Tsinghua University, China

A CMOS Perimeter Gated SPAD Based Digital Silicon Photomultiplier with Asynchronous AER Readout for PET
Applications .................................................................................. 105
Mst Shamim Ara Shawkat, Nicole McFarlane
University of Tennessee, United States

Image Enhancement Method Based on Adaptive Fraction Gamma Transformation and Color Restoration for Wireless
Capsule Endoscopy ......................................................................... 109
Mingzhu Long{1}, Zehua Lan{2}, Xiang Xie{1}, Guolin Li{1}, Zhihua Wang{1}
{1}Tsinghua University, China; {2}University of Electronic Science and Technology of China, China

A Portable Three-Dimensional Image Reconstruction System for Breast Tumor Detection ............................................. 113
Wen-Jun Wu, Jia-Jun Guo, Wai-Chi Fang
National Chiao Tung University, United States; National Chiao Tung University, Taiwan

Automated Tracking System for Identification of Tagged Mice for Automatic Social Behavior Analysis ................. 117
Fabio Marcuccio{3}, Alena Savonenko{2}, Ralph Etienne-Cummings{1}
{1}Johns Hopkins University, United States; {2}Johns Hopkins University School of Medicine, United States; {3}Politecnico di
Torino, Italy

Deep Convolutional Neural Networks for Automated Convulsion Scoring Using RGB-D Images ...................... 121
Zheyuan Wang{1}, Azizi Ray{2}, Kevin S. Murnane{2}, Maysam Ghovanloo{1}
{1}Georgia Institute of Technology, United States; {2}Mercer University, United States

Computational Stereo-Vision Model of Proto-Object Based Saliency in Three-Dimensional Space ..................... 125
Elena Mancinelli{2}, Ernst Niebur{1}, Ralph Etienne-Cummings{1}
{1}Johns Hopkins University, United States; {2}Politecnico di Torino, Italy

Missing Structural and Clinical Features Imputation for Semi-Supervised Alzheimer’s Disease Classification Using
Stacked Sparse Autoencoder .............................................................. 129
Eminal Jabason, M. Omair Ahmad, M.N.S. Swamy
Concordia University, Canada

Early Diagnosis of Mild Cognitive Impairment Using Random Forest Feature Selection ..................................... 133
Parisa Forouzanzehad, Alireza Abbaspour, Mercedes Cabrero, Malek Adjouadi
Florida International University, United States

IMU-Based Real-Time Acetabular Prosthesis Implant Angles Measurement
in Total Hip Replacement Surgeries ................................................... N/A
Jie Liu, Hong Chen, Zhihua Wang
Tsinghua University, China

ECG Signal Compression for Low-Power Sensor Nodes Using Sparse Frequency Spectrum Features .................. 141
Hui Huang, Shiyun Hu, Ye Sun
Michigan Technological University, United States

Framework of Applying Independent Component Analysis After Compressed Sensing for Electroencephalogram
Signals .......................................................................................... 145
Daisuke Kanemoto, Shun Katsumata, Masao Aihara, Makoto Ohki
University of Yamanashi, Japan
Multipoint Supported OFDM-Based System for High Robust Body Channel Communication

Wenyu Sun, Jian Zhao, Yuxuan Huang, Jingna Mao, Yinan Sun, Huazhong Yang, Yongpan Liu
Tsinghua University, China

A Low-Power High-Input-Impedance 70-dB Gain ECG Readout System with High Interference Tolerance

Chinnatip Ratametha{1}, Chanoknan Buaban{1}, Bhirawich Pholpoe{1}, Tanachai Limpisawas{1}, Pakom Prasopsin{2}, Samattachai Tepwimonpetkun{2}, Woradorn Wattanapanitch{1}
{1}Kasetsart University, Thailand; {2}Silicon Craft Technology Co. Ltd., Thailand

Extracting the Cole-Cole Model Parameters of Tissue-Mimicking Materials

Mohammed Fouda, Ahmed Khorsid, Ibrahim Alquaydheb, Ahmed Eltawil, Fadi Kurdahi
University of California, Irvine, United States

An Improved Update Rate Baud Rate CDR for Integrating Human Body Communication Receiver

Shovan Maity, Parikha Mehrotra, Shreyas Sen
Purdue University, United States

19:30
LIVE DEMOS
Room: Salon ABC
Chairs: Michael Suster and Steve Majerus

Live Demonstration: SeizelIT - a Wearable Multimodal Epileptic Seizure Detection Device

Steven Boeckx{1}, Wim van Paesschen{3}, Brecht Bonte{2}, Jonathan Dan{1}
{1}Byteflies, Belgium; {2}Pilipili, Belgium; {3}Universitair ziekenhuis Leuven, Belgium

Live Demonstration: a Soft Thermal Modulation System with Embedded Fluid Channels for Neuro-Vascular Assessment

Nil Z. Gurel, Donald Ward, Frank L. Hammond III, Omer T. Inan
Georgia Institute of Technology, United States

Live Demonstration: System Based on Electronic Skin and Cutaneous Electrostimulation for Sensory Feedback in Prosthetics

Mohamad Alameh{3}, Moustafa Saleh{3}, Flavio Anzovini{3}, Hoda Fares{3}, Ali Ibrahim{3}, Marta Franceschi{3}, Lucia Seminara{3}, Maurizio Valle{3}, Strahinja Dosen{1}, Dario Farina{2}
{1}Aalborg University, Denmark; {2}Imperial College London, United Kingdom; {3}University of Genoa, Italy

Live Demonstration: Sensor Automation Platform and Multi-Sensor Badge for the Sensory Impaired

Yousef Gtat, Sylvie Dâvila-Montero, Andrew J. Mason
Michigan State University, United States

Live Demonstration of Portable Systems Based on Silicon Sensors for the Monitoring of Physiological Parameters of Driver Drowsiness and Pulse Wave Velocity

Sabrina Conoci{2}, Francesco Rundo{2}, Giorgio Fallica{2}, Davide Lena{2}, Irene Buraioli{1}, Danilo Demarchi{1}
{1}Politecnico di Torino, Italy; {2}STMicroelectronics, Italy

Live Demonstration: 385 x 385 µm² 0.165V 270pW Fully-Integrated Supply-ModulatedOOK Tx in 65nm CMOS for Glasses-Free, Self-Powered, and Fuel-Cell-Embedded Continuous Glucose Monitoring Contact Lens

Kenya Hayashi, Shigeki Arata, Ge Xu, Shunya Murakami, Cong Dang Bui, Atsuki Kobayashi, Kiichi Niiitsu
Nagoya University, Japan
Live Demonstration: an Open-Source Test-Bench for Autonomous Ultrasound Imaging ..................................................181
Vida Pashaei, Alex Roman, Soumyajit Mandal
Case Western Reserve University, United States

Like Kleenex for Wearables: a Soft, Strong and Disposable ECG Monitoring System .....................................................182
Yusuf Bhagat(2), Patrick Verdon(2), Sai Avuthu(1), Daniel Parsons(2), Mark Sussman(1), Girish Wable(1), Ralph Hugeneck(2)
{1}JABIL, United States; {2}Nypro, United States

Live Demonstration: a Bluetooth Low Energy (BLE)-Enabled Wireless Link for Bidirectional Communications with a Neural Microsystem .................................................................183
Nicholas Vitale, Meysam Azin, Pedram Mohseni
Case Western Reserve University, United States

Live Demonstration: Augmented Reality Prosthesis Training with Real-Time Hand Trajectory Prediction and Neuromorphic Tactile Encoding ..............................................................................184
Christopher Hunt(1), Avinash Sharma(1), Mark Iskarous(1), Nitish V. Thakor(2)
{1}Johns Hopkins University, United States; {2}Johns Hopkins University / Singapore Institute for Neurotechnology, National University of Singapore, United States

Live Demonstration: Miniaturized Compact NIRS Probe Based on SiPM and Pulsed VCSEL Diode Routes to Wearable Devices ..............................................................................................................185
Sreenil Saha(1), Frederic Lesage(1), Mohamad Sawan(2)
{1}Ecole Polytechnique de Montreal, Canada; {2}Polytechnique Montreal, Canada

Live Demonstration: HemeChip - a Portable Microchip Electrophoresis Technology for Point-of-Care Sickle Cell Disease Screening ..............................................................................................186
Muhammad Noman Hasan, Arwa Fraiwan, Umut Gurkan, Jane Little
Case Western Reserve University, United States
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Description</th>
<th>Presenters</th>
</tr>
</thead>
</table>
| 8:00 – 9:30  | LECTURE SESSION: B1L-A. Circuits & Systems for Smart-Connected Health                | A Wearable Device for Minimally-Invasive Behind-the-Ear EEG and Evoked Potentials  
Marco Guermandi(2), Simone Benatti(2), Victor Javier Kartsch Moringo(2), Luca Benini(1)  
(1)ETH Zurich, Switzerland; (2)University of Bologna, Italy  
StethoVest: a Simultaneous Multichannel Wearable System for Cardiac Acoustic Mapping  
Christos Sapsanis(2), Nathaniel Welsh(2), Michael Pozin(2), Guillaume Garreau(1), Gaspar Tognetti(2), Hani Bakhshaei(4), Philippe O. Pouliquen(2), Rajat Mittal(2), William R. Thompson(3), Andreas G. Andreou(2)  
(1)IBM, United States; (2)Johns Hopkins University, United States; (3)Johns Hopkins University School of Medicine, United States; (4)L.E.K. Consulting, United States  
An Ultra-Low-Power 28nm CMOS Dual-Die ASIC Platform for Smart Hearables  
Yu Pu, Danny Butterfield, Jorge Garcia, Jing Xie, Mark Lin, Rohit Sauhta, Rick Farley, Steve Shellhammer, Moses Derkaloudisian, Adam Newham, Chunlei Shi, Ravi Shenoy, Evgeni Gousev, Rashid Attar  
Qualcomm Research, United States  
A Wetness Detection Technique Towards Scalable, Array-Based, Full-Textile Sensing  
Rachel White, Michael McKnight, Jordan Tabor, Talha Agcayazi, Tushar Ghosh, Alper Bozkurt  
North Carolina State University, United States  
Rakensess-Based Compressed Sensing of Surface Electromyography for Improved Hand Movement Recognition in the Compressed Domain  
Alex Marchioni(2), Mauro Mangia(2), Fabio Pareschi(2), Riccardo Rovatti(2), Gianluca Setti(1)  
(1)Politecnico di Torino, Italy; (2)University of Bologna, Italy  |
Tong Wu(2), Wenfeng Zhao(2), Edward Keefer(1), Zhi Yang(2)  
(1)Nerves Incorporated, United States; (2)University of Minnesota, United States  
ECG Arrhythmia Classification Using Transfer Learning from 2-Dimensional Deep CNN Features  
Milad Salem, Shayan Taheri, Jiann-Shiun Yuan  
University of Central Florida, United States  
A High Performance Approach for Classification of Motor Imagery EEG  
Waseem Abbas, Nadeem Khan  
Lahore University of Management Sciences, Pakistan  
Bowel Sound Detection Based on MFCC Feature and LSTM Neural Network  
Juzheng Liu(3), Yue Yin(3), Hanjun Jiang(3), Huili Kan(2), Zongwang Zhang(2), Ping Chen(1), Binjie Zhu(1), Zhihua Wang(3)  
(1)Beijing YieMed Medical Technology Co., Ltd, China; (2)Liaocheng People’s Hospital, China; (3)Tsinghua University, China  
Block-Sparse Compressive Sensing for High-Fidelity Recording of Photoplethysmogram  
Hossein Zamani, Fatemeh Marefat, Pedram Mohseni  
Case Western Reserve University, United States  
Hybrid IIR/FIR Wavelet Filter Banks for ECG Signal Denoising  
Yaprak Eminaga, Adem Coskun, Izzet Kale  
University of Westminster, United Kingdom |

XXX
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imbalance Learning Using Neural Networks for Seizure Detection</td>
<td>231</td>
</tr>
<tr>
<td>Javad Birjandtalab{1}, Vipul Jarmale{1}, Mehrdad Nourani{1}, Jay Harvey{2}</td>
<td></td>
</tr>
<tr>
<td>{1}University of Texas at Dallas, United States; {2}UT Southwestern Medical Center, United States</td>
<td></td>
</tr>
<tr>
<td>Automatic Artifact Reduction Based on MEMD-ICA for Seizure Prediction</td>
<td>235</td>
</tr>
<tr>
<td>Lihan Tang, Menglian Zhao, Yizhao Zhou, Xiaobo Wu</td>
<td></td>
</tr>
<tr>
<td>Zhejiang University, China</td>
<td></td>
</tr>
<tr>
<td>Registration of EMG Electrodes to Reduce Classification Errors Due to Electrode Shift</td>
<td>239</td>
</tr>
<tr>
<td>Cynthia Steinhardt{1}, Joseph Betthauser{1}, Christopher Hunt{1}, Nilish V. Thakor{2}</td>
<td></td>
</tr>
<tr>
<td>{1}Johns Hopkins University, United States; {2}Johns Hopkins University / Singapore Institute for Neurotechnology, National University of Singapore, United States</td>
<td></td>
</tr>
<tr>
<td>A Compact, Low-Noise, Chopped Front-End for Peripheral Nerve Recording in 180 nm CMOS</td>
<td>243</td>
</tr>
<tr>
<td>Jialin Liu, Ross Walker</td>
<td></td>
</tr>
<tr>
<td>University of Utah, United States</td>
<td></td>
</tr>
<tr>
<td>Exploring Mental State Changes During Hypnotherapy Using Adaptive Mixture Independent Component Analysis of EEG</td>
<td>247</td>
</tr>
<tr>
<td>Sheng-Hsiou Hsu, Yihan Zi, Ying Wu, Paula Jackson, Tzuy-Ping Jung</td>
<td></td>
</tr>
<tr>
<td>University of California, San Diego, United States</td>
<td></td>
</tr>
<tr>
<td>Continuous Blood Pressure Monitoring Using Wrist-Worn Bio-Impedance Sensors with Wet Electrodes</td>
<td>251</td>
</tr>
<tr>
<td>Bassem Ibrahim, Roozbeh Jafari</td>
<td></td>
</tr>
<tr>
<td>Texas A&amp;M University, United States</td>
<td></td>
</tr>
<tr>
<td>A Half-Shared Transimpedance Amplifier Architecture for High-Throughput CMOS Bioelectronics</td>
<td>255</td>
</tr>
<tr>
<td>Geoffrey Mulberry, Kevin White, Brian Kim</td>
<td></td>
</tr>
<tr>
<td>University of Central Florida, United States</td>
<td></td>
</tr>
<tr>
<td>High pH Resolution Extended Gate Type pH Image Sensors with the Charge Accumulation Circuit</td>
<td>259</td>
</tr>
<tr>
<td>Yoshitaka Arimi{2}, Yasuyuki Kimura{2}, Toshiki Wakamori{1}, Hiroo Yamamoto{1}, Seiichiro Mizuno{1}, Tatsuya Iwata{2}, Kazuhiro Takahashi{2}, Kazuaki Sawada{2}</td>
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<tr>
<td>{1}Hamamatsu Photonics, Japan; {2}Toyohashi University of Technology, Japan</td>
<td></td>
</tr>
<tr>
<td>Toward an Energy-Efficient Bridge-to-Digital Intracranial Pressure Sensing Interface</td>
<td>263</td>
</tr>
<tr>
<td>Ahmad Rezvanitabar, Gwangrok Jung, F. Levent Degertekin, Maysam Ghovanloo</td>
<td></td>
</tr>
<tr>
<td>Georgia Institute of Technology, United States</td>
<td></td>
</tr>
<tr>
<td>A 3.51 μW 0.31 μRms Biofuel Cell Enabled Integrated Analog CMOS Front-End in 130 nm CMOS</td>
<td>267</td>
</tr>
<tr>
<td>Huan Hu, Tanzila Islam, Chung-Ching Lin, Alla Kostyukova, Su Ha, Subhanshu Gupta</td>
<td></td>
</tr>
<tr>
<td>Washington State University, United States</td>
<td></td>
</tr>
<tr>
<td>A Bio-Impedance Measurement IC for Neural Interface Applications</td>
<td>271</td>
</tr>
<tr>
<td>Ajinkya Munge{1}, Varsha Sankar{1}, Mohammad S.E. Sendi{1}, Maysam Ghovanloo{1}, Ulkuhan Guler{2}</td>
<td></td>
</tr>
<tr>
<td>{1}Georgia Institute of Technology, United States; {2}Worcester Polytechnic Institute, United States</td>
<td></td>
</tr>
<tr>
<td>3D-Printed Electrocardiogram Electrodes for Heart Rate Detection in Canines</td>
<td>275</td>
</tr>
<tr>
<td>Marc Foster{2}, Patrick Erb{2}, Brenna Plank{1}, Helen West{1}, Jane Russenberger{1}, Margaret Gruen{2}, Michael Daniele{2}, David Roberts{2}, Alper Bozkurt{2}</td>
<td></td>
</tr>
<tr>
<td>{1}Guiding Eyes for the Blind, United States; {2}North Carolina State University, United States</td>
<td></td>
</tr>
<tr>
<td>An Asynchronous Auto-Biasing Circuit for Wearable Electrochemical Sensors</td>
<td>279</td>
</tr>
<tr>
<td>Matthew Douthwaite, Pantelis Georgiou</td>
<td></td>
</tr>
<tr>
<td>Imperial College London, United Kingdom</td>
<td></td>
</tr>
<tr>
<td>Circuit Implementation of Fluorescence Lifetime Measurement</td>
<td>283</td>
</tr>
<tr>
<td>Using Direct Exponential-to-Linear Conversion</td>
<td></td>
</tr>
<tr>
<td>Meera Punjya, Sameer Sonkusale</td>
<td></td>
</tr>
<tr>
<td>Tufts University, United States</td>
<td></td>
</tr>
</tbody>
</table>

xxxii
Low-Cost, Implantable Wireless Sensor Platform for Neuromodulation Research .......................................................... 287
Ian McAdams{4}, Hannah Kenyon{4}, Dennis Bourbeau{3}, Margot Damaser{4}, Christian Zorman{2}, Steve Majerus{1}
{1}Advanced Platform Technology Center Louis Stokes Veterans Affairs Medical Center, United States; {2}Case Western Reserve University, United States; {3}Functional Electrical Stimulation Center, United States; {4}Lerner Research Institute, United States

Capacitive Wireless Power and Data Transfer for Implantable Medical Devices ............................................................ 291
Asish Korupolu{2}, Reza Erfani{1}, Pedram Mohseni{1}, Sudip Nag{2}
{1}Case Western Reserve University, United States; {2}Indian Institute of Technology Kharagpur, India

Integrated Devices for Micro-Package Integrity Monitoring in mm-Scale Neural Implants ............................................. 295
Federico Mazza{1}, Yan Liu{1}, Nick Donaldson{2}, Timothy G. Constandinou{1}
{1}Imperial College London, United Kingdom; {2}University College London, United Kingdom

High-Speed Communication Up to 600 Mbps Over FDA-Cleared Implantable Wirelines .............................................. 299
Taufiq Ahmed, Naiia Tasneem, Ross Walker
University of Utah, United States

10:30 – 12:00
LECTURE SESSION: B3L-A, SPECIAL SESSION: On-Chip Machine Learning Design & Applications
Room: Salon ED
Chairs: Mingoo Seok and Mahsa Shoaran

Minimum Precision Requirements for Deep Learning with Biomedical Datasets ........................................................... 303
Charbel Sakr{2}, Naresh Shanbhag{1}
{1}University of Illinois at Urbana-Champaign, United States; {2}University of Illinois at Urbana-Champaign, United States

High-Capacity Fingerprint Recognition System Based on a Dynamic Memory-Capacity Estimation Technique .......... 307
Pavan Kumar Chundi, Ajay Kumar Sridhar, Saarthak Sarup, Mingoo Seok
Columbia University, United States

Inference and Learning Hardware Architecture for Neuro-Inspired Sparse Coding Algorithm ................................... 311
Chester Liu, Zhengya Zhang
University of Michigan, United States

Resting Tremor Detection in Parkinson’s Disease with Machine Learning and Kalman Filtering ............................. 315
Lin Yao{1}, Peter Brown{2}, Mahsa Shoaran{1}
{1}Cornell University, United States; {2}University of Oxford, United Kingdom

Deep Learning Based Reliable Early Epileptic Seizure Predictor .................................................................................. 319
Hisham Daoud, Magdy Bayoumi
University of Louisiana at Lafayette, United States

14:00 – 15:30
LECTURE SESSION: B4L-A – Biosensors, Biotelemetry & Neural Interface Circuits
Room: Salon ED
Chairs: Roman Genov and Maysam Ghovanloo

Miniaturized Probe for Time-Domain Near-Infrared Spectroscopy .............................................................................. 323
Sreenil Saha{1}, Yuankang Lu{1}, Sascha Weyers{2}, Frederic Lesage{1}, Mohamad Sawan{1}
{1}Ecole Polytechnique de Montreal, Canada; {2}IMS, Fraunhofer, Germany

Towards Low-Cost Cell Culturing Platforms with Integrated Sensing Capabilities ...................................................... 327
Panagiotis Kassanos, Salzitsa Anastasova, Guang-Zhong Yang
Imperial College London, United Kingdom

Toward a Robust Multi-Antenna Receiver for Wireless Recording from Freely-Behaving Animals ........................... 331
Byunghun Lee{3}, Yooyao Jia{2}, Fanpeng Kong{2}, Mark Connolly{1}, Babak Mahmoudi{1}, Maysam Ghovanloo{2}
{1}Emory University, United States; {2}Georgia Institute of Technology, United States; {3}Incheon National University, Korea

A Miniature Wireless Neural Recording System for Chronic Implantation in Freely Moving Animals ...................... 335
Mustafa Kanchwala, Grant McCallum, Dominique Durand
Case Western Reserve University, United States
600mW Active Rectifier with Shorting-Control for Wirelessly Powered Medical Implants..........................343
Robert Gallichan, David Budgett, Daniel McCormick
University of Auckland, New Zealand

An Ultrawideband Microwave Transceiver System for Breast Tumor Detection..............................N/A
Lin Sun(2), Zhenhua Hu(2), Huihai Wang(2), Dan Pan(1), Xiaofeng Zhang(1), Rui Wu(1), Fan Yang(1)
{1}Shenzhen ET Medical Technology Co., Ltd., China; {2}Shenzhen THz Technology Co., Ltd., China

An Ultra-Wideband-Insipred System-on-Chip for an Optical Bidirectional Transcutaneous Biotelemetry...........351
Andrea De Marcellis[2], Guido Di Patrizio Stanchieri[2], Elia Palange[2], Marco Faccio[2], Timothy G. Constantinou[1]
{1}Imperial College London, United Kingdom; {2}University of L’Aquila, Italy

Biosafety Considerations of a Capacitive Link for Wireless Power Transfer to Biomedical Implants.............355
Reza Erfani, Fatemeh Marefat, Pedram Mohseni
Case Western Reserve University, United States

An Investigation on Inter-Degeneration Effect in Body Channel Based Multi-Node Wireless Power Transfer......359
Yuxuan Huang, Jian Zhao, Wenyu Sun, Jingna Mao, Huazhong Yang, Yongpan Liu
Tsinghua University, China

Robust Wireless Power Transfer to Multiple mm-Scale Freely-Positioned Neural Implants .....................363
Peilong Feng, Timothy G. Constantinou
Imperial College London, United Kingdom

A Sub-nW Wake-Up Receiver for Human Body Communication.........................................................367
Shovan Maity, David Yang, Baibhab Chatterjee, Shreyas Sen
Purdue University, United States

A Bluetooth Low Energy (BLE)-Enabled Wireless Link for Bidirectional Communications with a Neural Microsystem..............................................................371
Nicholas Vitale, Meysam Azin, Pedram Mohseni
Case Western Reserve University, United States

Battery-Free, Sticker-Like, Device for Health Monitoring, Operated by Optical Power Transfer ..................375
Nattakarn Wuthibenjaphonchai(2), Makito Haruta(2), Toshihiko Noda(2), Kiyotaka Sasagawa(2), Takashi Tokuda(2),
Mohamad Sawan(3), Sandro Carrara(1), Jun Ohta(2)
{1}École polytechnique fédérale de Lausanne, Switzerland; {2}Nara Institute of Science and Technology, Japan;
{3}Polytechnique Montreal, Canada

A 385µm × 385µm 0.165 V 0.27 nW Fully-Integrated Supply-Modulated OOK CMOS TX in 65nm CMOS for Glasses-Free, Self-Powered, and Fuel-Cell-Embedded Continuous Glucose Monitoring Contact Lens..................379
Kenya Hayashi, Shigeki Arata, Ge Xu, Shunya Murakami, Cong Dang Bui, Takuyoshi Doike, Maya Matsunaga, Atsuki
Kobayashi, Kiichi Niitsu
Nagoya University, Japan

Injection-Locked Power Oscillator for Resonance Frequency Tracking in Wireless Power Transfer.............383
Guangyin Feng, Ji-Jon S1
Nanyang Technological University, Singapore

The Challenges of Designing an Inductively Coupled Power Link for Åm-Sized on-Chip Coils ..................387
Adam Khalifa[1], Yasha Karimi[2], Yuanfei Huang[2], Milutin Stanačević[2], Ralph Etienne-Cummings[1]
{1}Johns Hopkins University, United States; {2}Stony Brook University, United States
Design of Multiple-Charge-Pump System for Implantable Biomedical Applications ..................................................391
Shiau-Pin Lin, Ming-Dou Ker
National Chiao-Tung University, Taiwan

Excitation and Emission Filters for Implantable Fluorescence Imaging Devices by Laser Lift-Off Process .......395
Kiyotaka Sasagawa, Yasumi Ohta, Makito Haruta, Toshihiko Noda, Takashi Tokuda, Jun Ohta
Nara Institute of Science and Technology, Japan

An Ultrasonically Powered and Controlled Ultra-High-Frequency Biphasic Electrical Neurostimulator ..........399
Lucia Tacchetti, Wouter A. Serdijn, Vasiliki Giagka
Delft University of Technology, Netherlands

Multi-Coil High Efficiency Wireless Charger System for Hermetically Sealed Biomedical Implants ..............403
Jihun Lee, Arto Nurminen
Brown University, United States

Two-Port Networks to Model Galvanic Coupling for Intrabody Communications and Power Transfer to Implants ..................................................407
Laura Becerra-Fajardo, Marc Tudela-Pi, Antoni Ivorra
Universitat Pompeu Fabra, Spain

Online Predictive Modeling for the Thermal Effect of Implantable Devices .........................................................411
Ruizhi Chai{1}, Yen-Pang Lai{1}, Wen Sun{2}, Maysam Ghovanloo{1}, Ying Zhang{1}
{1}Georgia Institute of Technology, United States; {2}Tianjin University, China

Flexible Ultra-Resolution Subdermal EEG Probes .........................................................................................415
Zabir Ahmed, Jay Reddy, Kaustubh Deshpande, Ashwati Krishnan, Praveen Venkatesh, Shawn Kelly, Pulkit Grover, Maysamreza Chamanzar
Carnegie Mellon University, United States

ECoG Electrode Array with Embedded Coupling Capacitors for Area Efficient Neural Recording ..............419
Ehsan Ashoori, Heyu Yin, Sina Parsnejad, Joseph W Salatino, Erin K Purcell, Andrew J. Mason
Michigan State University, United States

16:30 – 18:00
LECTURE SESSION: B6L-A - Lab-on-Chip, Point-of-Care Technologies & CAS for Neuroscience
Room: Salon ED
Chairs: Jennifer Blain Christen and Roland Thewes

Monitoring Red Blood Cell Aggregation Dynamics in Stasis and Under Flow Using a Microfluidic Dielectric Sensor ........................................................................................................................................423
Debnath Maji, Michael Suster, Pedram Mohseni
Case Western Reserve University, United States

Toward Point-of-Care Assessment of Platelet Count-Induced Changes in Whole Blood Coagulation with a Dielectric Microsensor ........................................................................................................427
Debnath Maji, Ujjal Sekhon, Anirban Sen Gupta, Michael Suster, Pedram Mohseni
Case Western Reserve University, United States

Manipulating and Patterning Micro/Nanoparticles in Liquid Using Multimode Membrane Resonators ..........431
Hao Jia, Xia Liu, Philip Feng
Case Western Reserve University, United States

Dual-Mode Microelectrode Array Featuring 20k Electrodes and High SNR for Extracellular Recording of Neural Networks ........................................................................................................435
Xinyue Yuan{1}, Vishalini Emmenegger{1}, Marie Engelene J. Obien{2}, Andreas Hierlemann{1}, Urs Frey{2}
{1}ETH Zurich, Switzerland; {2}ETH Zurich, MaxWell Biosystems AG, Switzerland

Energy-Efficient Architecture for Neural Spikes Acquisition .................................................................................439
Dmitry Osipov, Steffen Paul, Heiko Stemmann, Andreas K. Kreiter
University of Bremen, Germany
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 9:30</td>
<td>LECTURE SESSION: C1L-A. Bio-Inspired &amp; Neuromorphic Human Machine Interfaces</td>
</tr>
<tr>
<td></td>
<td>Room: Salon ED</td>
</tr>
<tr>
<td></td>
<td>Chairs: Gert Cauwenberghs and Andrew Mason</td>
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<tr>
<td></td>
<td><strong>TruffleBot: Low-Cost Multi-Parametric Machine Olfaction</strong></td>
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<td></td>
<td>Jason Webster, Pratistha Shakya, Eamonn Kennedy, Michael Caplan, Christopher Rose, Jacob Rosenstein</td>
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<td></td>
<td>Brown University, United States</td>
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<td><strong>Unsupervised Synaptic Pruning Strategies for Restricted Boltzmann Machines</strong></td>
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<td>Surabhi Kalyan, Siddharth Joshi, Sadique Sheik, Bruno U. Pedroni, Gert Cauwenberghs</td>
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<td>University of California, San Diego , United States; University of California, San Diego, United States</td>
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<td><strong>Power-Law Compression Expands the Dynamic Range of a Neuromorphic Echolocation System</strong></td>
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<td>Chenxi Wen, Timothy Horiuchi</td>
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<td>University of Maryland, College Park, United States</td>
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<tr>
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<td><strong>Processing EMG Signals Using Reservoir Computing on an Event-Based Neuromorphic System</strong></td>
</tr>
<tr>
<td></td>
<td>Elisa Donati(2), Melika Payvand(2), Nicoletta Risi(2), Renate Krause(2), Karla Burelo(2), Thomas Dalgaty(1), Elisa Vianello(1), Giacomo Indiveri(2)</td>
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<td>{1}CEA-Leti, France; {2}University of Zurich / ETH Zurich, Switzerland</td>
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<td></td>
<td><strong>A Real-Time Surface EMG Decomposition System for Non-Invasive Human-Machine Interfaces</strong></td>
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<td>Deren Barsakcioglu, Dario Farina</td>
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<td>Imperial College London, United Kingdom</td>
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<td>Room: Salon FGH</td>
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<td>Chairs: Takashi Tokuda and Laleh Najafizadeh</td>
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<tr>
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<td><strong>An Efficient Hardware Architecture Design of EEMD Processor for Electrocardiography Signal</strong></td>
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<td>I-Wei Chen, Shang-Yi Chuang, Wen-Jun Wu, Wai-Chi Fang</td>
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<td>National Chiao Tung University, Taiwan</td>
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<td><strong>User Adaptive QRS Detection Based on One Target Clustering and Correlation Coefficient</strong></td>
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<td>Yang Zhao, Zhongxia Shang, Yong Lian</td>
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<td>York University, Canada</td>
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<td><strong>Continuous Peripheral Blood Pressure Measurement with ECG and PPG Signals at Fingertips</strong></td>
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<td>Kar Mun Lee(4), Zhengyang Qian(4), Ryosuke Yabuki(4), Bang Du(3), Hisashi Kino(1), Takaumi Fukushima(4), Koji Kiyoyama(2), Tetsu Tanaka(4)</td>
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<td>{1}Frontier Research Institute for Interdisciplinary Sciences, Japan; {2}Nagasaki Institute of Applied Science, Japan; {3}School of Engineering, Japan; {4}Tohoku University, Japan</td>
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<td><strong>One-Shot Learning for iEEG Seizure Detection Using End-to-End Binary Operations: Local Binary Patterns with Hyperdimensional Computing</strong></td>
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<td>Alessio Burrello(1), Kaspar Schindler(2), Luca Benini(1), Abbas Rahimi(1)</td>
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<td>{1}ETH Zurich, Switzerland; {2}Inselspital Bern, Switzerland</td>
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<td><strong>High Frequency Oscillations Detection in Patients Combining Wavelet Decomposition and Back Propagation Neural Network</strong></td>
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<td>Dakun Lai(1), Zenghui Kan(1), Wenjing Chen(2), Heng Zhang(2)</td>
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<td>{1}University of Electronic Science and Technology of China, China; {2}West China Hospital of Sichuan University, China</td>
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<td><strong>Learning from Non-Seizure Clusters for EEG Analytics</strong></td>
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<td>Javad Birjandtalab(1), Melvin James(1), Mehrdad Nourani(1), Jay Harvey(2)</td>
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<td>{1}University of Texas at Dallas, United States; {2}UT Southwestern Medical Center, United States</td>
</tr>
</tbody>
</table>
Real-Time Spike Sorting for Multi-Electrode Arrays with Online Independent Component Analysis................................487
Alessio Paolo Buccino{2}, Sheng-Hsiou Hsu{1}, Gert Cauwenberghs{1}
{1}University of California, San Diego, United States; {2}University of Oslo, Norway

A Clockless Method of Flicker Noise Suppression in Continuous-Time Acquisition of Biosignals .................491
Michal Maslik{1}, Tor Sverre Lande{2}, Timothy G. Constandinou{1}
{1}Imperial College London, United Kingdom; {2}University of Oslo, Norway

A MVDR- MWF Combined Algorithm for Binaural Hearing Aid System...............................................................495
Zhuoyi Sun{2}, Yingdan Li{1}, Hanjun Jiang{2}, Fei Chen{1}, Zhihua Wang{2}
{1}Tianjin University, China; {2}Tsinghua University, China

Energy Efficient Convolutional Neural Networks for EEG Artifact Detection..................................................499
Mohit Khatwani{2}, Morteza Hosseini{2}, Hiren Paneliya{2}, W. David Hairston{1}, Nicholas Waytowich{1}, Tinoosh Mohsenin{2}
{1}United States Army Research Laboratory, United States; {2}University of Maryland - Baltimore County, United States

Early Detection of Epileptic Activity on EEG Signals Using Phase-Preserving Quantization Method...............503
Sylmarie Davila-Montero, Ehsan Ashoori, Andrew J. Mason
Michigan State University, United States

A Patient-Specific Machine Learning Based EEG Processor for Accurate Estimation of Depth of Anesthesia.....507
Fatima Hameed Khan, Usman Ashraf, Muhammad Awaiz Bin Altaf, Wala Saadeh
Lahore University of Management Sciences, Pakistan

Embedded Classification of Local Field Potentials Recorded from Rat Barrel Cortex with Implanted Multi-Electrode Array.....................................................................................................................................511
Xiying Wang{1}, Michele Magno{1}, Lukas Cavigelli{1}, Mutli Mahmud{3}, Claudia Cecchetto{2}, Stefano Vassanelli{3}, Luca Benini{1}
{1}ETH Zurich, Switzerland; {2}OIST Graduate University, Japan; {3}University of Padova, Italy

Microscopic Ultrasound Stimulation of Neural Tissue.............................................................................................515
Hesam Sadeghi Gougheri, Mehdi Kiani
Pennsylvania State University, United States

Efficient Implementation and Stability Analysis of a HV-CMOS Current/Voltage Mode Stimulator ..................519
Michael Haas{2}, Maurits Ortmanns{1}
{1}Universitat Ulm, Germany; {2}University of Ulm, Germany

Embedding Adaptive Stimulation Algorithms for a New Implantable Deep-Brain Stimulation Research Tool......523
Jeffrey Herron, David Linde, Tom Chouinard, Benjamin Isaacson, Scott Stanslaski, Duane Bourget, Tom Adamski, Timothy Denison
Medtronic, United States

Embedded Phase-Amplitude Coupling Based Closed-Loop Platform for Parkinson’s Disease.........................527
Molly Alexandre{2}, Song Luan{2}, Zoltan Mari{1}, William Anderson{3}, Yousef Salimpour{3}, Timothy G. Constandinou{2}, Laszlo Grand{2}
{1}Cleveland Clinic Lou Ruvo Center for Brain Health, United Kingdom; {2}Imperial College London, United Kingdom; {3}Johns Hopkins University, United States

Spatiotemporal Analysis of Simultaneous Repetitive Electrical Stimulation with Voltage Sensitive Dye.............531
Lucas de Levy Oliveira, Naofumi Suematsu, Tetsuya Yagi
Osaka University, Japan

Jiawen Xue, Xiang Xie, Guolin Li, Zhihua Wang
Tsinghua University, China

Guided Frequency Filter for Block-DCT Compressed Capsule Endoscopic Images........................................539
GPU-Accelerated Parameter Selection for Neural Connectivity Analysis Devices .......................................................... 543
Gerard O'Leary{3}, Ian Taras{3}, Dylan Malone Stuart{3}, Jamie Koerner{3}, David Groppe{1}, Taufik Valiante{2}, Roman Genov{3}
{1}Krembil Research Institute, Canada; {2}Toronto Western Hospital, Canada; {3}University of Toronto, Canada

Links Between DNA-Based Diet and Salivary Leptin Hormone Concentration ................................................................. 547
Francesca Cavallo, Khalid Mirza, Christofer Toumazou
Imperial College London, United Kingdom

Predicting Drug-Target Interaction Using Deep Matrix Factorization .............................................................................. 551
Hafez Eslami Manoochehri, Mehrdad Nourani
University of Texas at Dallas, United States

10:30 – 12:00
LECTURE SESSION: C3L-A – Implantable Medical Devices
Room: Salon ED
Chairs: Wouter Serdijn and Mehdi Kiani

A 0.0094mm2/Channel Time-Based Beat Frequency ADC in 65nm CMOS for Intra-Electrode Neural Recording...555
Luke Everson, Somnath Kundu, Gang Chen, Zhi Yang, Timoth Ebner, Chris Kim
University of Minnesota, United States

A Charge Balanced Neural Stimulator with 3.3V to 49V Supply Compliance and Arbitrary Programmable Current Pulse Shapes................................................................. 559
Armin Taschwer{1}, Natalie Butz{2}, Manuel Kahler{2}, Daniel Rossbach{1}, Yiannis Manoli{2}
{1}Hahn-Schickard, Germany; {2}University of Freiburg - IMTEK, Germany

Design Considerations for Ground Referencing in Multi-Module Neural Implants ............................................................... 563
Dorian Haci, Yan Liu, Sara Ghereishizadeh, Timothy G. Constandinou
Imperial College London, United Kingdom

A Fully Wireless Implantable Multi-Channel Muscle Stimulator with Closed-Loop Feedback Control .................. 567
Li Jing Ong{3}, Shih-Chiang Liu{3}, Marshal Dian Sheng Wong{3}, Tafadzwa Sibindi{3}, Gil Gerald Lasam Gammad{3},
Chne-Wuen Tsai{3}, Astrid Rusly{3}, Kian Ann Ng{3}, Camilo Libedinsky{2}, Sudip Nag{1}, Shih-Cheng Yen{2}
{1}Indian Institute of Technology Kharagpur, India; {2}National University of Singapore, Singapore; {3}NUS Sinapse Insitute, Singapore

Preliminary Evaluation of an Injectable Sensor for Subcutaneous Photoplethysmography in Animals.............. 571
James Reynolds, Parvez Ahmmed, Alper Bozkurt
North Carolina State University, United States

14:00 – 15:30
LECTURE SESSION: C4L-A. SPECIAL SESSION - Circuits & Systems for Food Chain
Room: Salon ED
Chairs: Mohamad Sawan and Danilo Demarchi

New System for Nitrites and Nitrates Detection from Natural Water Sources ................................................................. 575
Carmen Moldovan{2}, Marian Ion{2}, Silviu Dinulescu{2}, Mihaela Savin{2}, Costin Brasoveanu{2}, Bogdan Firtat{2}, Mariuca Gartner{1}, Cecilia Lele{1}, Susana Mihaiu{1}, Marin Gheorghe{3}, Simona Gheorghe{3}
{1}ICF Ilie Murgulescu, Romania; {2}IMT-Bucharest, Romania; {3}NANOM MEMS, Romania

Objective Human Gustatory Sensitivity Assessment Through a Portable Electronic Device ................................ 579
Eleonora Sulas, Alice Evelina Martins, Piero Cosseddu, Andrea Achilli, Giorgia Sollai, Iole Tomassini Barbarossa, Luigi Raffo,
Annalisa Bonfiglio, Danilo Pani
University of Cagliari, Italy

A Capsule Endoscope System for Wide Visualization Field and Location Tracking ............................................. 583
Jaejun Jang, Hoi-Jun Yoo
KAIST, Korea
Implementation of the Neural Engineering Framework on the TrueNorth Neurosynaptic System ........................................587
Kate Fischl{2}, Terrence Stewart{3}, Kaitlin Fair{1}, Andreas G. Andreou{2}
{1}Air Force Research Laboratory, United States; {2}Johns Hopkins University, United States; {3}University of Waterloo, Canada

Small-Footprint Spiking Neural Networks for Power-Efficient Keyword Spotting ........................................................591
Bruno U. Pedroni{2}, Sadique Sheik{2}, Hesham Mostafa{2}, Somnath Paul{1}, Charles Augustine{1}, Gert Cauwenberghs{2}
{1}Intel Corporation, United States; {2}University of California, San Diego, United States

Word2vec Word Similarities on IBM’s TrueNorth Neurosynaptic System .................................................................595
Daniel Mendat{2}, Andrew Cassidy{1}, Guido Zarrella{3}, Andreas G. Andreou{2}
{1}IBM Research-Almaden, United States; {2}Johns Hopkins University, United States; {3}MITRE Corporation, United States

Proto-Object Based Saliency Model with Second-Order Texture Feature .................................................................599
Takeshi Uejima, Ernst Niebur, Ralph Etienne-Cummings
Johns Hopkins University, United States

Odor Source Localization on a Nano Quadcopter ..................................................................................................603
Alexander Castro, Nevo Magnezi, Biruk Sintayehu, Alexander Quinto, Pamela Abshire
University of Maryland, United States

A Soft-Matter Biomolecular Memristor Synapse for Neuromorphic Systems .....................................................607
Ryan Weiss{2}, Joseph Najem{1}, Sakib Hasan{2}, Catherine Schuman{1}, Alex Belianinov{1}, Patrick Collier{1}, Stephen Sarles{2}, Garrett Rose{2}
{1}Oak Ridge National Laboratory, United States; {2}University of Tennessee, United States

Design and Analysis of Staged Mutual Inhibition to Implement Bi-Stable Neuronal Toggle Switch .........................611
Farimah Mapar{2}, Ron Weiss{1}
{1}Massachusetts Institute of Technology, United States; {2}Northeastern University, United States

A Neuromorphic Computing System for Bitwise Neural Networks Based on ReRAM Synaptic Array .............615
Pin-Yi Li, Cheng-Han Yang, Wei-Hao Chen, Jian-Hao Huang, Wei-Chen Wei, Je-Syu Liu, Wei-Yu Lin, Tzu-Hsiang Hsu, Chih-Cheng Hsieh, Ren-Shuo Liu, Meng-Fan Chang, Kea-Tiong Tang
National Tsing Hua University, Taiwan

Unsupervised Learning and Adaptive Classification of Neuromorphic Tactile Encoding of Textures ..................619
Mark Iskarous{1}, Harrison Nguyen{1}, Luke Osborn{1}, Joseph Bethhauser{1}, Nitish V. Thakor{2}
{1}Johns Hopkins University, United States; {2}Johns Hopkins University / Singapore Institute for Neurotechnology, National University of Singapore, United States

A Compact and Accelerated Spike-Based Neuromorphic VLSI Chip for Pattern Recognition ........................623
Cheng Li, Yuan Wang, Jin Zhang, Xiaoxin Cui, Ru Huang
Peking University, China

Dynamic Texture Decoding Using a Neuromorphic Multilayer Tactile Sensor ...................................................627
Harrison Nguyen{1}, Luke Osborn{1}, Mark Iskarous{1}, Christopher Shalla{1}, Christopher Hunt{1}, Joseph Bethhauser{1}, Nitish V. Thakor{2}
{1}Johns Hopkins University, United States; {2}Johns Hopkins University / Singapore Institute for Neurotechnology, National University of Singapore, United States

No Touch Vitals: a Pilot Study of Non-Contact Vital Signs Acquisition in Exercising Volunteers .....................631
Geoffrey Caparo{1}, Cameron Etebari{2}, Katherine Luchette{2}, Laura Mercurio{1}, Derek Merck{1}, Ihor Kirenko{3}, Marek Bartula{3}, Christine Swisher{3}, Haibo Wang{3}, Leo Kobayashi{1}
{1}Alpert Medical School of Brown University, United States; {2}Brown University, United States; {3}Philips Research, Netherlands; {3}Philips Research, United States
Development of a Portable Intraoral Camera and a Smartphone Application for Oral Cancer PDT Treatment Guidance and Monitoring .........................................................635
Paola Leon{2}, Grant Rudd{2}, Liam Daly{2}, Hui Liu{2}, Jonathan Celli{2}, Tayyaba Hasan{1}, Filip Cuckov{2}
{1}Massachusetts General Hospital, United States; {2}University of Massachusetts Boston, United States

Low-Power Hardware-Based Deep-Learning Diagnostics Support Case Study ..........................................................639
Khushal Sethi, Vivek Parmar, Manan Suri
Indian Institute of Technology Delhi, India

Spur Gears and Leadscrew Based, Efficient and Flexible Infusion System Design ......................................................643
Muhammad Rizwan Khan, Muhammad Talha Tariq, Farasat Munir, Muhammad Awais Bin Altaf
Lahore University of Management Sciences, Pakistan

Considerations for Low-Cost Reader Design and Label Selection for Lateral Flow Assays ......................................647
Uwadie Obahiaegbun, Jennifer Blain Christen
Arizona State University, United States

A Compact Continuous Non-Invasive Glucose Monitoring System with Phase-Sensitive Front End .....................651
Soumyasanta Laha, Savas Kaya, Nikhil Dhinagar, Yunus Kelestemur, Vishawajeet Puri
Ohio University, United States

Thermally Controlled Lab-on-PCB for Biomedical Applications .................................................................................655
Dorian Haci{1}, Yan Liu{1}, Konstantin Nikolic{1}, Danilo Demarchi{2}, Timothy G. Constantino{1}, Pantelis Georgiou{1}
{1}Imperial College London, United Kingdom; {2}Politecnico di Torino, Italy

A μRadio CMOS Device for Real-Time in-Tissue Monitoring of Human Organoids ..............................................659
Gian Nicola Angotzi, Marco Crepaldi, Aziliz Lecomte, Lidia Giantomasi, Silvia Rancati, Davide Depietri Tonelli, Luca Berdondini
Fondazione Istituto Italiano di Tecnologia, Italy

3D-Printed Cross-Flow Mixer Gradient Within Minutes for Microfluidic Applications .........................................663
Shilpa Sivashankar{2}, Hend Mkaouar{1}, Yousof Mashraei{1}, Kholod Alamoudi{1}, Niveen M. Khashab{1}, Khaled Nabil Salama{1}
{1}King Abdullah University of Science and Technology, Saudi Arabia; {2}North Carolina State University, United States

Design and Custom Fabrication of a Smart Temperature Sensor for an Organ-on-a-Chip Platform ..................667
Ronaldo Ponte, Vasiliki Giagka, Wouter A. Serdijn
Delft University of Technology, Netherlands

16:30 – 18:00
LECTURE SESSION: C6L-A - Biomedical Imaging, Image Guided Therapy, & Assistive Technologies
Room: Salon ED
Chairs: Jun Ohta and Nitish Thakor

Development and Preliminary Assessment of an Arch-Shaped Stand-Alone Intraoral Tongue Drive System for People with Tetraplegia .................................................................671
Fanpeng Kong, Md Nazmus Sahadat, Maysam Ghovanloo
Georgia Institute of Technology, United States

Ultra-High-Resolution Millimeter-Wave Imaging: a New Promising Skin Cancer Imaging Modality ..................675
Amir Mirbeik-Sabzevari{2}, Negar Tavassoian{2}, Robin Ashinoff{1}
{1}Hackensack University Medical Center, United States; {2}Stevens Institute of Technology, United States

Conformal Ultrasound Transducer Array for Image-Guided Neural Therapy .........................................................679
Vida Pashaei, Alex Roman, Soumyajit Mandal
Case Western Reserve University, United States

A Nano-Filter-Integrated CMOS Image Sensor for Fluorescent Biomedical Imaging .........................................683
Yu Jiang{1}, Hao Yu{3}, Xiaojian Fu{2}, Chathuranga Hettiarachchi{1}, He Xu{2}, Ye Li{2}, Tien Hoa Nguyen{1}, Longtao Dong{3}, Cuong Dang{1}, Qing Zhang{1}
{1}Nanyang Technological University, Singapore; {2}Southeast University, Singapore; {3}Southern University of Science and Technology, Singapore
A 120 dB, Asynchronous, Time-Domain, Multispectral Imager for Near-Infrared Fluorescence Image-Guided Surgery

Steven Blair{1}, Missael Garcia{1}, Nan Cui{2}, Viktor Gruev{1}
{1}University of Illinois at Urbana-Champaign, United States; {2}Washington University in St. Louis, United States

Smart Prosthesis System: Continuous Automatic Prosthesis Fitting Adjustent and Real-Time Stress Visualization

Yi Cai{1}, Diliang Chen{1}, Guanzhou Qu{1}, Hongping Zhao{2}, Rahila Ansari{1}, Ming-Chun Huang{1}
{1}Case Western Reserve University, United States; {2}Ohio State University, United States

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