6th International Conference on Applied Human Factors and Ergonomics (AHFE 2015) and the Affiliated Conferences

Procedia Manufacturing Volume 3

Las Vegas, Nevada, USA 26 – 30 July 2015

Part 5 of 8

Editors:

Tareq Ahram Waldemar Karwowski **Dylan Schmorrow**

ISBN: 978-1-5108-1537-7

PART 5

FORECASTING OF FINANCIAL SERIES FOR THE NEVADA DEPARTMENT OF TRANSPORTATION USING DETERMINISTIC AND STOCHASTIC METHODOLOGIES	3317
CHANGES OF DRIVING PERFORMANCE AND GAZE BEHAVIOR OF NOVICE DRIVERS DURING A 30- MIN SIMULATOR-BASED TRAINING	3325
P. M. Van Leeuwen, R. Happee, J. C. F. De Winter THE CONTRIBUTION OF SAFE DRIVING TRAINING IN EDUCATING DRIVERS TO RISK PERCEPTION Federica Biassoni, Stefania Balzarotti, Maria Rita Ciceri	3333
THE LIKELIHOODS OF BICYCLIST STEERING PATTERNS IN RESPONSE TO BEING PASSED BY MOTORISTS	3339
Ching-Huei Lai, Ji-Liang Doong, Kai-Hsiang Chuang, Chun-Chia Hsu THE BEHAVIOR ANALYSIS OF PEDESTRIAN-CYCLIST INTERACTION AT NON-SIGNALIZED INTERSECTION ON CAMPUS: CONFLICT AND INTERFERENCE	3345
Bixiang Li, Shengwu Xiong, Xiaohong Li, Mianfang Liu, Xiaohong Zhang PEDESTRIAN CROSSING PATTERNS PREFERENCE AT A NON-SIGNALIZED CROSSWALK	
Rolla Jamil, Shengwu Xiong, Xiangzhen Kong, Senwen Zheng, Zhixiang Fang EFFECTS OF WORKLOAD ON ACADEMIC PERFORMANCE AMONG WORKING STUDENTS IN AN UNDERGRADUATE ENGINEERING PROGRAM	
Yoshiki B. Kurata, Rose Marie Lou P. Bano, Aura C. Matias MOVING TOWARDS THE INCOMPLETE: A RESEARCH AGENDA FOR THE DEVELOPMENT OF	3300
FUTURE PRODUCTS IN THE DIGITAL ECONOMY Philip Davies, Irene Ng THE NEED FOR A TOOL TO SUPPORT USERS OF E-SCIENCE INFRASTRUCTURES IN A VIRTUAL	3368
LABORATORY ENVIRONMENT	3375
AN INTENTIONAL APPROACH TO THE ENGINEERING OF KNOWLEDGE-INTENSIVE SERVICE SYSTEMS	3383
BEYOND THE INNOVATION: AN EXPLORATORY STUDY OF DESIGNING WEB-BASED SELF-SERVICES	3391
Chen-Fu Yang, Chih-Shiang Wu, Yu-Hao Huang, Tung-Jung Sung IMPLEMENTING SERVICE ENGINEERING IN HEALTHCARE SERVICES: THE CASE OF NEONATAL INTENSIVE CARE UNIT (NICU)	3399
TURNING DATA INTO EXPERIENCES, PRO-ACTIVE EXPERIENCES AND THEIR SIGNIFICANCE FOR CUSTOMERS AND BUSINESS	3406
Agnieszka Maria Walorska ROOMING THE PATIENT" VS "MOVING THE PATIENT	3412
ENGAGING HEALTHCARE USERS THROUGH GAMIFICATION IN KNOWLEDGE SHARING OF CONTINUOUS IMPROVEMENT IN HEALTHCARE Elizabeth A. Cudney, Susan L. Murray, Connor M. Sprague, Lalaine M. Byrd, Frances M. Morris, Nathaniel Merwin, Debra L. Warner	3416
GAMIFICATION OF BUSINESS PROCESSES: RE-DESIGNING WORK IN PRODUCTION AND SERVICE INDUSTRY	3424
Oliver Korn, Albrecht Schmidt ASSESSMENT OF POSSIBLE FACTORS AFFECTING SEVERITY OF MUSCLE FATIGUE AMONG CONVENIENCE STORE EMPLOYEES	3432
Aura C. Matias, Eduardo Z. Rustico Jr. CO-CREATIVE ASPECTS OF DATA-DRIVEN DISCOVERY	
Laura C. Anderson, Cheryl A. Kieliszewski COMPUTER-RELATED CAUSAL ATTRIBUTIONS: THE ROLE OF SOCIODEMOGRAPHIC FACTORS	3448
INVESTIGATING THE EFFECT ON THE LEARNING CURVE OF PERFORMING SIMILAR WORK DURING THE BREAK BETWEEN WORK STINTS Iris Ann G. Martinez, Josefa Angelie D. Revilla	3456

IDENTIFYING CHARACTERISTICS OF JOBS OF FRONT-LINE PERSONNEL THAT AFFECT	
ABNORMAL IDLE TIME: A CASE STUDY ON A POPULAR AMUSEMENT CENTER IN THE PHILIPPINES	3463
UNVEILING THE MYSTERIES OF THE "BLACK HOLE" IN RECRUITING SYSTEMS: CONNECTING	
RECRUITERS AND JOB SEEKERS LIKE A JIGSAW PUZZLE	3470
Linda Lim, Yuanqiong Wang, Yukinobu Hoshino, Muhammad Nazrul Islam	
HOW GOOD IS THIS DESTINATION WEBSITE: A USER-CENTERED EVALUATION OF PROVINCIAL TOURISM WEBSITES	2170
Charles Ruel Novabos, Aura Matias, Miguela Mena	3470
USABILITY TESTING OF CASH-IN MACHINES FOR FILIPINO USE	3486
Jan Michael Canapi, Maxine Chan, Mary Abigail Contreras, Alyssa Jean Portus	
DEVELOPING THE MANPOWER COMPLEMENT FOR BUSINESS ANALYTICS SERVICE	2404
PROFESSIONALS: A CASE STUDY ON THE CHALLENGES FACED BY THE PHILIPPINES Eugene Rex L. Jalao	3494
AN O2O COMMERCE SERVICE FRAMEWORK AND ITS EFFECTIVENESS ANALYSIS WITH	
APPLICATION TO PROXIMITY COMMERCE	3498
Tse-Ming Tsai, Wen-Nan Wang, Yu-Tin Lin, Seng-Cho Choub	
CUSTOMER'S FLOW ANALYSIS IN PHYSICAL RETAIL STORE Yeh-Kuang Wu, Hui-Chun Wang, Liang-Chun Chang, Shih-Chun Chou	3506
CONSTRUCTING CONCEPT SPACE FROM SOCIAL COLLABORATIVE EDITING	3514
Cheng-Hung Tsai, Tsun Ku, Liang-Pu Chen, Ping-Che Yang	
OUTFIT BROWSER - AN IMAGE-DATA-DRIVEN USER INTERFACE FOR SELF-SERVICE SYSTEMS IN	
FASHION STORES	3521
Alexander Piazza, Christian Zagel, Sebastian Huber, Matthias Hille, Freimut Bodendorf THE GEEK FACTOR – ASSESSING TECHNOLOGY DESIRABILITY	2520
Christian Zagel, Sebastian Huber, Freimut Bodendorf	3329
DESIGNING FOR TECHNOLOGY ACCEPTANCE IN AN AGEING SOCIETY THROUGH MULTI-	
STAKEHOLDER COLLABORATION	3535
Pengxiang Jia, Yuan Lu, Barbara Wajda	2512
BOLLYWOOD: ENTERTAINMENT AS OPIATE OF THE MASSES	3543
HUMAN-CENTERED DESIGN CURRICULUM FOR MULTIDISCIPLINARY APPLICATION AT DESIGN	
FACULTIES	3551
Leonhard Rainer Glomann	
AN EXPERIENCE-BASED DECISION SUPPORT SYSTEM FOR SUPPORTING GOVERNANCE IN ENTERPRISE	2550
Clara Bassano, Giuseppe D'Aniello, Matteo Gaeta, Sergio Miranda, Francesco Orciuoli, Kurt Sandkuhl, Stefania Tomasiello	3339
FUZZY CONSENSUS MODEL FOR GOVERNANCE IN SMART SERVICE SYSTEMS	3567
Francesco Calza, Matteo Gaeta, Vincenzo Loia, Francesco Orciuoli, Paolo Piciocchi, Luigi Rarità, James Spohrer, Aurelio	
Tommasetti ANALYSIS OF OPEN INNOVATION INTERMEDIARIES PLATFORMS BY CONSIDERING THE SMART	
SERVICE SYSTEM PERSPECTIVE	3575
Tindara Abbate, Danilo De Luca, Angelo Gaeta, Mario Lepore, Sergio Miranda, Mirko Perano	
REVISION OF CURRICULA IN HIGHER EDUCATION SERVICE PROVISION: FOR BETTER LEARNING	
ENGAGEMENT AND COLLABORATIVE LEARNING	3583
Doreen Nielsen, Petros Ieromonachou, Yong Lin, Anthony White INTEGRATING HUMAN MOTIVATION IN SERVICE PRODUCTIVITY	3501
Amardeep Banerjee	
A HUMAN-CENTERED CREDIT-BANKING SYSTEM FOR CONVENIENT, FAIR AND SECURE	
CARPOOLING AMONG MEMBERS OF AN ASSOCIATION	3599
HS. Jacob Tsao, Magdalini Eirinaki DEVELOPMENT OF EMOTIONAL INTERVENTION STRATEGY FRAMEWORK FOCUSED ON THE	
SOCIO-PLEASURE FOR PRO-ENVIRONMENTAL BEHAVIORS	3607
Yun-Hee Lee, Eui-Chul Jung	
DEVELOPING A FRAMEWORK FOR MEASURING EFFECTIVENESS OF SUSTAINABILITY	
COMMUNICATIONS THROUGH CORPORATE WEBSITES Alfonso Siano, Paolo Piciocchi, Agostino Vollero, Maddalena Della Volpe, Maria Palazzo, Francesca Conte, Danilo De Luca,	3615
Sara Amabile	
DETERMINISTIC AND STOCHASTIC ON QUALITY SERVICES IN THE EDUCATION AND HEALTH	
MEDIA.	3621
Salah A. M. Elshourbagy, Y. A. Alzubaidi E-SERVICE-DOMINANT LOGIC	2620
Wojciech Cellary	3029
DEVELOPMENT OF A CONCEPTUAL FRAMEWORK FOR IMPROVING SAFETY FOR PEDESTRIANS	
USING SMARTPHONES WHILE WALKING: CHALLENGES AND RESEARCH NEEDS	3636
Xiangzhen Kong, Shengwu Xiong, Zhixing Zhu, Senwen Zheng, Guoyang Long	
PROACTIVITY IN A CAREER AS A STRATEGY OF THE INTENTIONAL CONSTRUCTION OF AN INDIVIDUAL FUTURE IN THE WORLD ORIENTED TOWARD A GLOBAL CHANGE	3644
Agnieszka Cybal-Michalska	

PREFERENCES FOR ONLINE COURSE DELIVERY METHODS IN HIGHER EDUCATION FOR	
STUDENTS WITH AUTISM SPECTRUM DISORDERS	3651
Debra Satterfield, Christopher Lepage, Nora Ladjahasan BRINGING COMPUTATIONAL THINKING TO STEM EDUCATION	2657
Samar I. Swaid	3637
A PERSONA-BASED EXTENSION FOR MASSIVE OPEN ONLINE COURSES IN ACCESSIBLE DESIGN	3663
WHEN LEADERS BECOME STRATEGISTS. A NEW LOOK AT DETERMINANTS OF LEADERSHIP	
STYLES THROUGH THEIR RELATIONSHIP WITH STRATEGIC THINKING	3669
SOCIO-CULTURAL CIRCUMSTANCES TO ESTABLISH UNIVERSITY SPIN-OFF COMPANIES	3677
ENVIRONMENTAL MANAGEMENT: AN OVERVIEW IN HIGHER EDUCATION INSTITUTIONS	3682
THREE-DIMENSIONAL (3D) ANALYSIS OF KNEE SHAPE FOR DESIGNING A KNEE-PAD	3689
DIGITAL HUMAN MODELLING AND THE AGEING WORKFORCE	3694
Keith Case, Amjad Hussain, Russell Marshall, Stephen Summerskill, Diane Gyi ACCOMMODATION LEVELS FOR ELLIPSOID VERSUS CUBOID DEFINED BOUNDARY CASES	3702
Dan Högberg, Erik Brolin, Lars Hanson THE DEVELOPMENT OF AN OBJECTIVE METHODOLOGY FOR THE EVALUATION OF DRIVERS'	
FIELD OF VIEW	3709
Russell Marshall, Steve Summerskill THE DEVELOPMENT OF A TRUCK CONCEPT TO ALLOW IMPROVED DIRECT VISION OF	
VULNERABLE ROAD USERS BY DRIVERS	3717
PREDICTING HUMAN PERFORMANCE DIFFERENCES ON MULTIPLE INTERFACE ALTERNATIVES:	
KLM, GOMS AND COGTOOL ARE UNRELIABLE	3725
DYNAMIC FOOTWEAR FIT MODEL SIMILAR TO NIOSH LIFTING EQUATION	3732
Ameersing Luximon DEVELOPMENT OF AN OPTIMIZATION METHOD FOR LOCATING THE PELVIS IN AN AUTOMOBILE	
SEATSEAT	3738
Jangwoon Park, Sheila M. Ebert, Matthew P. Reed, Jason J. Hallman DATA PROCESSING AND ANALYSIS FOR THE 2012 CANADIAN FORCES 3D ANTHROPOMETRIC	
SURVEYSURVESSING AND ANALTSIS FOR THE 2012 CANADIAN FORCES 3D ANTHROPOMETRIC	3745
Chang Shu, Pengcheng Xi, Allan Keefe IMPLEMENTATION OF SUITABLE COMFORT MODEL FOR POSTURE AND MOTION PREDICTION IN	
DHM SUPPORTED VEHICLE DESIGN	3753
Christian Bergman, Pamela Ruiz Castro, Dan Högberg, Lars Hanson	2750
A COMPOSITE METHOD FOR HUMAN FOOT STRUCTURAL MODELING	3759
MULTI-SCALE PREDICTIVE HUMAN MODEL FOR PREVENTING INJURIES IN THE ANKLE AND	
KNEE	3767
SOCIAL CUEING IN HUMAN ATTENTION WITHIN THE CONTEXT OF ORIENTATION TASKS	3775
L. Paletta, N. J. Neuhuber, M. Schwarz, V. Wagner, K. W. Kallus	
HUMAN FACTORS ANALYSIS USING WEARABLE SENSORS IN THE CONTEXT OF COGNITIVE AND EMOTIONAL AROUSAL	3782
L. Paletta, N. M. Pittino, M. Schwarz, V. Wagner, K. W. Kallus	
THE LANGUAGE OF CARING: DIGITAL HUMAN MODELING, PRACTICE PATTERNS, AND PERFORMANCE ASSESSMENT	3788
J. R. Hotchkiss, J. D. Paladino, C. W. Brackney, A. M. Kaynar, P. S. Crooke	2707
AMERICAN FOOTBALL HELMET FOR PREVENTING CONCUSSION, A LITERATURE REVIEWS. Saeed Ahmadisoleymani, James Yang	3796
MODELLING GESTURAL KNOW-HOW IN POTTERY BASED ON STATE-SPACE ESTIMATION AND SYSTEM DYNAMIC SIMULATION	2904
Sotiris Manitsaris, Alina Glushkova, Eleni Katsouli, Athanasios Manitsaris, Christina Volioti	
PREDICTING REALISTIC AND PRECISE HUMAN BODY MODELS UNDER CLOTHING BASED ON ORTHOGONAL-VIEW PHOTOS	3812
Shuaiyin Zhu, P. Y. Mok MODELING VISUALLY GUIDED HAND REACH FOR DIGITAL HUMAN MODELS	3820
Nitesh Bhatia, Anand V. Pathak, Dibakar Sen	
CAPTURING HUMAN MOTION IN NATURAL ENVIRONMENTS Zhiqing Cheng, Anthony Ligouri, Ryan Fogle, Timothy Webb	
SITUATING COGNITION WITHIN THE VIRTUAL WORLD	3836
Paul R. Smart, Katia Sycara TOWARDS IMPLEMENTING A REAL-TIME DEFORMABLE HUMAN MUSCLE MODEL IN DIGITAL	
HUMAN ENVIRONMENTS	3844
Abhinay Sharma, Angela Dani, Anith J. Mathai, Timothy Marler, Karim Abdel-Malek	

AN ENSEMBLE LEARNING BASED MODEL FOR REAL ESTATE PROJECT CLASSIFICATION	3852
Worapat Paireekreng, Worawat Choensawat CULTURAL TRAINING AS BEHAVIOR CHANGE W. Lewis Johnson	3860
EXTENDING GENERATIVE MODELS OF LARGE SCALE NETWORKS	3868
UNDERSTANDING PATTERNS OF INFRASTRUCTURE DEVELOPMENT IN THE ACTIVE WAR THEATER OF AFGHANISTAN OVER THE PERIOD 2002-2010	3876
INSENSITIVITY TO UNETHICAL BEHAVIOR IN DECISION MAKING WHEN INDIRECTLY INTERMEDIATED Atsuo Murata, Yasunari Matsushita, Makoto Moriwaka	3883
CONDITION ON OCCURRENCE OF UNETHICAL BEHAVIOR DUE TO LOSS AVERSION IN DECISION MAKING	3891
STATISTICS OF A VARIETY OF COGNITIVE BIASES IN DECISION MAKING IN CRUCIAL ACCIDENT ANALYSES	3898
Atsuo Murata, Haruka Yoshimura UNNOTICED UNETHICAL BEHAVIOR IN DECISION MAKING WHEN GRADUALLY ESCALATED Atsuo Murata, Tomoya Morinaga	3906
OUTCOME BIAS IN DECISION MAKING ON PUNISHMENT OR REWARD	3911
CRISIS MANAGEMENT SIMULATIONS: LESSONS LEARNED FROM A CROSS-CULTURAL PERSPECTIVE	3917
Tristan Endsley, James Reep, Michael D. McNeese, Peter Forster TOOLS FOR VALIDATING CAUSAL AND PREDICTIVE CLAIMS IN SOCIAL SCIENCE MODELS	
Amy Sliva, Scott Neal Reilly, Randy Casstevens, John Chamberlain GROUP PROFILING AUTOMATION FOR CRIME AND TERRORISM (GPACT) Jennifer Lautenschlager, Alicia Ruvinsky, Ian Warfield, Brian Kettler	3933
MAKING THE CASE FOR AN ECOLOGICAL APPROACH TO CROSS-CULTURAL COMPETENCE TRAINING AND ASSESSMENT	3941
Kyle J. Behymer, Julio C. Mateo, Michael J. McCloskey WITHDRAWN: HUMAN FACTORS IN THE CONTEXT OF EXCELLENCE MODELS: EUROPEAN FOUNDATION FOR QUALITY MANAGEMENT (EFQM) EXCELLENCE SOFTWARE MODEL AND CROSS-CULTURAL ANALYSIS	N/A
U. Asgher, M. Leba, A. Ionica, R. Moraru, R. Ahmad WHAT DOES IT TAKE TO TRAIN A GOOD STRANGER	
Robert Hubal, Mike van Lent, Jonathan Wender, Brian Lande, Scott Flanagan, Sarah Quinn A COMPARATIVE STUDY ON ORGANIZATIONAL STRESS IN SOUTH ASIAN CULTURES Umer Asgher, Tahir Ali, Riaz Ahmad, Redha Taïar, Roland Iosif Moraru	
AN UPDATE ON THE INTERNATIONAL STATUS AND USAGE OF CROSS-CULTURALLY ADAPTED VERSIONS OF THE OSWESTRY DISABILITY INDEX1	3971
Peter Sheahan, Erika Nelson-Wong, Steven Fischer ANALYSIS OF OPINION EVOLUTION IN A MULTI-CULTURAL STUDENT SOCIAL NETWORK Omar Lizardo, Michael Penta, Matthew Chandler, Casey Doyle, G. Korniss, Boleslaw K. Szymanski, Jonathan Z. Bakdash	3974
DEVELOPING A CAPABILITY TO ELICIT AND STRUCTURE PSYCHOSOCIAL DECISION INFORMATION WITHIN COMPUTATIONAL MODELS	3982
KEY CULTURE-GENERAL INTERACTIONAL SKILLS FOR MILITARY PERSONNEL	
PROVIDING DECISION SUPPORT USING INSIGHTS FROM NARRATIVE SCIENCE David Koelle, Victoria Romero, Noa Palmon, Peter Weyhrauch, James Niehaus, Jonathan Pfautz	3998
APPLICATION OF PERSONALITY THEORIES FOR THE DESIGN AND DEVELOPMENT OF CROSS- CULTURAL DECISION-MAKING TOOLS	4006
Brian Prue, Lauren D. Stern, Patrick Hurley, Geoffrey Catto, David Young, Jonathan Pfautz BEHAVIOR INFLUENCE ASSESSMENT OF IMPACTS OF THE GRAND ETHIOPIAN RENAISSANCE DAM ON UNREST AND POPULAR SUPPORT WITHIN EGYPT	4014
Robert Jeffers, Michael Bernard, Howard Passell, Emily Silver CROSS-CULTURAL DIFFERENCES IN LINGUISTIC REFERENCE TRACKING Lelyn D. Saner, Brook Hefright	4022
LEVERAGING TOPIC MODELS TO DEVELOP METRICS FOR EVALUATING THE QUALITY OF NARRATIVE THREADS EXTRACTED FROM NEWS STORIES	4028
Jason Schlachter, Alicia Ruvinsky, Luis Asencios Reynoso, Sathappan Muthiah, Naren Ramakrishnan TEACHING SOCIAL INTERACTION SKILLS WITH STEALTHY TRAINING TECHNIQUES Scott Flanagan, Zachary Horn, Camilla Knott, Frederick Diedrich, Kent Halverson, Lisa Lucia, Shawn Weil	4036
CROSS CULTURAL REPORT OF VALUES AND DECISIONS IN THE MULTI ROUND ULTIMATUM GAME AND THE CENTIPEDE GAME	4044
Elnaz Nouri, David Traum EMBEDDING EMOTIONAL INTELLIGENCE INTO MILITARY TRAINING CONTEXTS Kevin B. Oden, Monika Lohani, Marissa McCoy, James Crutchfield, Susan Rivers	4052

NEW MOBILE PHONE AND WEBCAM HAND IMAGES DATABASES FOR PERSONAL	
AUTHENTICATION AND IDENTIFICATION	4060
Ahmad Hassanat, Mouhammd Al-Awadi, Eman Btoush, Amani Al- Btoush, Esra'a Alhasanat, Ghada Altarawneh	
CROSS-CULTURAL TRAINING ANALYSIS VIA SOCIAL SCIENCE AND COMPUTER VISION METHODS	4068
Peter Tu, Jixu Chen, Ming-Ching Chang, Ting Yu, Tai-Peng Tian, Gabriela Rubin, Julia Hockett, Aubrey Logan-Terry	
HISTORICAL PATTERNS IN ANCIENT AND CONTEMPORARY MIGRATION PHENOMENA IN THE	
MEDITERRANEAN AREA	4076
Umer Asgher, György Bánhegyi	
ANALYSIS AND MODELING OF ACADEMIA'S COLLABORATIVE DECISION SUPPORT SYSTEM BASED	
ON KEY PERFORMANCE INDICATORS AND DEGREE OF CERTAINTY	4084
Umer Asgher, Margarida Romero	
NAVIGATING FACE-THREATENING TERRAIN: QUESTIONING STRATEGIES IN CROSS-CULTURAL	
MILITARY TRAINING SCENARIOS	4090
Rebecca Rubin Damari, Gabriela Rubin, Aubrey Logan-Terry	
ENHANCING THE UTILITY OF COMMUNITY DETECTION RESEARCH	4098
William J. Salter	
WE DON'T KNOW WHAT WE DON'T KNOW—BUT WE CAN LEARN: LESSONS LEARNED FROM	
AFGHANISTAN ON WOMEN, PEACE AND SECURITY	4106
Sheila M.Q. Scanlon	
A CONTEXT-AWARE DECISION SUPPORT TOOL FOR ASSESSING AND MITIGATING DRIVERS OF	
CIVIL INSTABILITY	4115
Ryan S. Mullins, Adam Fouse, Robert McCormack, Stacy Lovell Pfautz	
MOTIVATING NARRATIVE REPRESENTATION FOR TRAINING CROSS-CULTURAL INTERACTION	4121
Robert E. Wray, Jeremiah T. Folsom-Kovarik, Angela Woods, Randolph M. Jones	
A METHODOLOGY FOR CAPTURING AND FUSING UNCONSCIOUS COGNITION WITH	
COMPUTATION	4129
Paul Mario Koola, Perakath Benjamin, Sae Schatz, Gian Colombo	
FRAGILITY AND DESTABILIZING PROTEST: COMBINING EVENT AND STRUCTURAL DATA FOR	
IMPROVED FORECASTS	4136
Miguel Garces, Ian S. Lustick, Brian P. Levey	
SOCIOCULTURAL—GEOSPATIAL ANTHROPOLOGICAL PORTAL (SC-GAP): ENHANCED	
SOCIOCULTURAL UNDERSTANDING THROUGH CROWDSOURCED SERVICE MEMBER NARRATIVES	4144
Mark Aschenbrennar, Jason Koo, Daniel Toshner, Kristen Tsolis, Michael Jaye	