# TABLE OF CONTENTS

MAKING TIME FLY: USING FILLERS TO IMPROVE PERCEIVED LATENCY IN CROWD-POWERED CONVERSATIONAL SYSTEMS ................................................................. 2  
  Tahir Abbas, Ujwal Gadiraju, Vassilis-Javed Khan, Panos Markopoulos

EXPLAINING AUTONOMOUS DECISIONS IN SWARMS OF HUMAN-ON-THE-LOOP SMALL UNMANNED AERIAL SYSTEMS .................................................. 15  
  Ankit Agrawal, Jane Cleland-Huang

PTERODACTYL: TWO-STEP REDACTION OF IMAGES FOR ROBUST FACE DEIDENTIFICATION ................................................................. 27  
  Abdullah Alshaibani, Alexander J. Quinn

FROM HUMAN EXPLANATION TO MODEL INTERPRETABLE: A FRAMEWORK BASED ON WEIGHT OF EVIDENCE .................................................. 35  
  David Alvarez Melis, Harmanpreet Kaur, Hal Daumé III, Hanna Wallach, Jennifer Wortman Vaughan

A CHECKLIST TO COMBAT COGNITIVE BIASES IN CROWDSOURCING .................................................. 48  
  Tim Draws, Alisa Rieger, Oana Inel, Ujwal Gadiraju, Nava Tintarev

ITERATIVE QUALITY CONTROL STRATEGIES FOR EXPERT MEDICAL IMAGE LABELING .................................................. 60  
  Beverly Freeman, Naama Hammel, Sonia Phene, Abigail Huang, Rebecca Ackermann, Olga Kanzheleva, Miles Hutson, Caitlin Taggart, Quang Duong, Rory Sayres

ITERATIVE HUMAN-IN-THE-LOOP DISCOVERY OF UNKNOWN UNKNOWNS IN IMAGE DATASETS .................................................. 72  
  Lei Han, Xiao Dong, Gianluca Demartini

MODELING SIMULTANEOUS PREFERENCES FOR AGE, GENDER, RACE, AND PROFESSIONAL PROFILES IN GOVERNMENT-EXPENSE SPENDING: A CONJOINT ANALYSIS .................................................. 84  
  Lujain Ibrahim, Mohammad M. Ghassemi, Tuka Alhanai

HUMAN+AI CROWD TASK ASSIGNMENT CONSIDERING RESULT QUALITY REQUIREMENTS ........................................................................ 97  
  Masaki Kobayashi, Kei Wakabayashi, Atsuyuki Morishima

EXPLORING THE MUSIC PERCEPTION SKILLS OF CROWD WORKERS .................................................. 108  
  Ioannis Petros Samiotis, Sihang Qiu, Christoph Lofi, Jie Yang, Ujwal Gadiraju, Alessandro Bozzon

ON THE BAYESIAN RATIONAL ASSUMPTION IN INFORMATION DESIGN .................................................. 120  
  Wei Tang, Chien-Ju Ho

FORECAST AGGREGATION VIA PEER PREDICTION ........................................................................ 131  
  Juntao Wang, Yang Liu, Yiling Chen

RAPID INSTANCE-LEVEL KNOWLEDGE ACQUISITION FOR GOOGLE MAPS FROM CLASS-LEVEL COMMON SENSE ........................................................................ 143  
  Chris Welty, Lora Aroyo, Flip Korn, Sara M. McCarthy, Shubin Zhao
UTILITY OF CROWDSOURCED USER EXPERIMENTS FOR MEASURING THE CENTRAL TENDENCY OF USER PERFORMANCE TO EVALUATE ERROR-RATE MODELS ON GUIS .......... 155
   Shota Yamanaka

ENHANCING IMAGE CLASSIFICATION CAPABILITIES OF CROWDSOURCING-BASED METHODS THROUGH EXPANDED INPUT ELICITATION ........................................................................ 166
   Romena Yasmin, Joshua T. Grassel, Md Mahmudulla Hassan, Olac Fuentes, Adolfo R. Escobedo

STREAMCOLLAB: A STREAMING CROWD-AI COLLABORATIVE SYSTEM TO SMART URBAN INFRASTRUCTURE MONITORING IN SOCIAL SENSING ........................................ 179
   Yang Zhang, Lanyu Shang, Ruohan Zong, Zeng Wang, Ziyi Kou, Dong Wang

Author Index