IAAI-20 Schedule

Sunday, February 9

8:00 – 8:30 AM
AAAI-20 Welcome and Opening Remarks, Awards

8:30 – 9:20 AM
AAAI Presidential Address
Yolanda Gil

9:30 AM – 10:45 AM
AI in Health
Session Chair:

148: Multi-Task Learning for Diabetic Retinopathy Grading and Lesion Segmentation
Alex Foo, Wynne Hsu, Mong Li Lee, Gilbert Lim, Tien Yin Wong

151: A Natural Language Processing System for Extracting Evidence of Drug Repurposing from Scientific Publications
Shivashankar Subramanian, Ioana Baldini, Sushma Ravichandran, Dmitriy A. Katz-Rogozhnikov, Karthikeyan Natesan Ramamurthy, Prasanna Sattigeri, Kush R. Varshney, Annmarie Wang, Pradeep Mangalath, Laura B. Kleiman

189: Improving ECG Classification Using Generative Adversarial Networks
Tomer Golany, Gal Lavee, Shai Tejman Yarden, Kira Radinsky

191: Machine-Learning-Based Functional Microcirculation Analysis
Ossama Mahmoud, GH Janssen, Mahmoud R. El-Sakka

135: Combining Real-Time Segmentation and Classification of Rehabilitation Exercises with LSTM Networks and Pointwise Boosting
Antonio Bevilacqua, Giovanni Ciampi, Rob Argent, Brian Caulfield, Tahar Kechadi

11:15 AM – 12:30 PM
AI in Customer Support and Marketing
Session Chair:

Deployed
113: How Machine Learning Is Improving U.S. Navy Customer Support
Michael Powell, Jamison A. Rotz, Kevin D. O'Malley

Deployed
70: Question Quality Improvement: Deep Question Understanding for Incident Management in Technical Support Domain
Anupama Ray, Csaba Hadhazi, Pooja Aggarwal, Gargi Dasgupta, Amit Paradkar

Deployed
198: Feedback-Based Self-Learning in Large-Scale Conversational AI Agents
Pragaash Ponnusamy, Alireza Roshan Ghias, Chenlei Guo, Ruhi Sarikaya

21: Online Evaluation of Audiences for Targeted Advertising via Bandit Experiments
Tong Geng, Xiliang Lin, Harikesh S. Nair

2:00 – 3:10 PM
AI in Visual Inspection and Detection
Session Chair:

Deployed
100: FedVision: An Online Visual Object Detection Platform Powered by Federated Learning
Yang Liu, Anbu Huang, Yun Luo, He Huang, Youzhi Liu, Yuanyuan Chen, Lican Feng, Tianjian Chen, Han Yu, Qiang Yang

Deployed
169: Embedding Convolution Neural Network-Based Defect Finder for Deployed Vision Inspector in Manufacturing Company Frontec
Kyoung Jun Lee, Jun Woo Kwon, Soohong Min, Jungho Yoon

184: Probabilistic Super Resolution for Mineral Spectroscopy
Alberto Candela, David R. Thompson, David Wettergreen, Kerry Cawse-Nicholson, Sven Geier, Michael L. Eastwood, Robert O. Green

133: Calorie Estimation in a Real-World Recipe Service
Jun Harashima, Makoto Hiramatsu, Satoshi Sanjo

3:45 PM – 5:05 PM
AI in Trade and Finance
Session Chair:

172: Discovery News: A Generic Framework for Financial News Recommendation
Chong Wang, Lisa Kim, Grace Bang, Himani Singh, Russell Kociuba, Steven Pomerville, Xiaomo Liu

77: Improving Lives of Indebted Farmers Using Deep Learning: Predicting Agricultural Produce Prices Using Convolutional Neural Networks
Hangzhi Guo, Alexander Woodruff, Amulya Yadav

190: Using Small Business Banking Data for Explainable Credit Risk Scoring
Wei Wang, Christopher Lesner, Alexander Ran, Marko Rukonic, Jason Xue, Eric Shiu

170: Detecting Suspicious Timber Trades
Debanjan Datta, M. Raihanul Islam, Nathan Self, Amelia Meadows, John Simeone, Willow Outhwaite, Chen Hin Keong, Amy Smith, Linda Walker, Naren Ramakrishnan

Deployed
157: Clarity: Data-Driven Automatic Assessment of Product Competitiveness
Sheema Usmani, Mariana Bernagozzi, Yufeng Huang, Michelle Morales, Amir Sabet Sarvestani, Biplav Srivastava

5:20 – 7:20 PM
AAAI-20 Turing Award Special Event
Yoshua Bengio *(University of Montreal and Mila),* **Geoffrey E. Hinton** *(Google, The Vector Institute, and University of Toronto),* **Yann LeCun** *(New York University and Facebook)*
Introduction by

Monday, February 10

8:30 – 9:20 AM
AAAI-20 Invited Talk: Combining Machine Learning and Control for Reactive Robots
Aude Billard, EPFL – Ecole Polytechnique Federale de Lausanne, Switzerland
Introduction by

9:30 – 10:30 AM
AI in Emergency Readiness and Response
Session Chair:

79: EMSContExt: EMS Protocol-Driven Concept Extraction for Cognitive Assistance in Emergency Response
Sarah Masud Preum, Sile Shu, Homa Alemzadeh, John A. Stankovic

144: Can Eruptions Be Predicted? Short-Term Prediction of Volcanic Eruptions via Attention-Based Long Short-Term Memory
Hiep V. Le, Tsuyoshi Murata, Masato Iguchi

129: Improving Efficiency of Volunteer-Based Food Rescue Operations
Zheyuan Ryan Shi, Yiwen Yuan, Kimberly Lo, Leah Lizarondo, Fei Fang

42: GRACE: Generating Summary Reports Automatically for Cognitive Assistance in Emergency Response
M Arif Rahman, Sarah M. Preum, Ronald Williams, Homa Alemzadeh, John A. Stankovic

11:15 AM – 12:15 PM
IAAI Invited Talk
David Cox, Director, MIT-Watson AI Lab
Introduction by

2:00 – 3:10
AI for Recommendation Engines
Session Chair:

Deployed
196: Accelerating Ranking in E-Commerce Search Engines through Contextual Factor Selection
Anxiang Zeng, Han Yu, Qing Da, Yusen Zan, Chunyan Miao

Deployed
161: Understanding Chat Messages for Sticker Recommendation in Messaging Apps
Abhishek Laddha, Mohamed Hanoosh, Debdoot Mukherjee, Parth Patwa, Ankur Narang

139: Implicit Skills Extraction Using Document Embedding and Its Use in Job Recommendation
Akshay Gugnani, Hemant Misra

21: Online Evaluation of Audiences for Targeted Advertising via Bandit Experiments
Tong Geng, Xiliang Lin, Harikesh S. Nair

3:45 PM – 5:05 PM

AI in Utiliies
Session Chair:

Deployed
99: PIDS: An Intelligent Electric Power Management Platform
Yongqing Zheng, Han Yu, Yuliang Shi, Kun Zhang, Shuai Zhen, Lizhen Cui, Cyril Leung, Chunyan Miao

149: Automatic Building and Labeling of HD Maps with Deep Learning
Mahdi Elhousni, Yecheng Lyu, Ziming Zhang, Xinming Huang

166: A Machine Learning Approach to Identity Houses with High Lead Tap Water Concentrations
Seyedsaeed Hajiseyedjavadi, Michael Blackhurst, Hassan Ali Karimi

19: Analog Accelerator for Simulation and Diagnostics
Alexander Feldman, Ion Matei, Emil Totev, Johan de Kleer

Deployed
57: Day-Ahead Forecasting of Losses in the Distribution Network
Nisha Dalal, Martin Mølnå, Mette Herrem, Magne Røen, Odd Erik Gundersen

5:20 PM – 6:10 PM
Robert S. Engelmore Memorial Award Lecture: The Third AI Summer
Henry Kautz, University of Rochester
Introduction by

6:15 PM – 7:15 PM
AAAI-20 AI Debate
Moderator: Kevin Leyton-Brown

Tuesday, February 11

8:30 AM – 9:20 AM
AAAI-20/IAAI-20 Joint Invited Talk
Dawn Song, University of California, Berkeley
Introduction by

9:30 AM – 10:45 AM
AI in Text Analysis, Classification and Generation Usecases
Session Chair:

147: A System for Medical Information Extraction and Verification from Unstructured Text
Damir Juric, Giorgos Stoilos, Andre Melo, Jonathan Moore, Mohammad Khodadadi

175: Iterative Data Programming for Expanding Text Classification Corpora
Neil Mallinar, Abhishek Shah, Tin Kam Ho, Rajendra Ugrani, Ayush Gupta

199: Kanji Workbook: A Writing-Based Intelligent Tutoring System for Learning Proper Japanese Kanji Writing Technique with Instructor-Emulated Assessment
Paul Taele, Jung In Koh, Tracy Hammond

137: Automated Utterance Generation
Soham Parikh, Quaizar Vohra, Mitul Tiwari

130: Chemical and Textual Embeddings for Drug Repurposing
Galia Nordon, Levi Gottlieb, Kira Radinsky

11:15 AM – 12:25 PM
AI for Trust and Trust of AI
Session Chair:

62: Draining the Water Hole: Mitigating Social Engineering Attacks with CyberTWEAK
Zheyuan Ryan Shi, Aaron Schlenker, Brian Hay, Daniel Bittleston, Siyu Gao, Emily Peterson, John Trezza, Fei Fang

Deployed
152: Automated Conversation Review to Surface Virtual Assistant Misunderstandings: Reducing Cost and Increasing Privacy
Ian Beaver, Abdullah Mueen

Challenge
153: AI Trust in Business Processes: The Need for Process-Aware Explanations
Steve T.K. Jan, Vatche Ishakian, Vinod Muthusamy

61: Did that Lost Ballot Box Cost Me a Seat? Computing Manipulations of STV Elections
Michelle Blom, Andrew Conway, Peter J. Stuckey, Vanessa J. Teague

3:50 PM – 4:40 PM
AAAI-20 Invited Talk: The Economic Value of Data for Targeted Pricing
Susan Athey, Stanford University

4:45 PM – 6:15 PM
AAAI-20 AI History Panel: Advancing AI by Playing Games
Moderator: Amy Greenwald
Panelists: Murray Campbell, Michael Bowling, and Hiroaki Kitano