Workshop #1 Leading Edge Consortium

Title: AI x AI: Let’s Talk Assessment Innovation and Artificial Intelligence

Presenters: Robert Gibby, IBM; Matthew Neale, Revelian; Faisal Ahmed, Knockri

Workshop Description:
Technology advances, including artificial intelligence and game-based assessment, are creating new possibilities for more engaging, efficient and predictive assessments. This workshop will focus on innovations for screening, cognitive ability and skill-based assessments as well as applications for interviews. The workshop will go beyond the demos and user experiences to unpack the science and analytics underlying these next generation assessments to help I-O psychologists and HR professionals make informed decisions for their use of next generation assessment.

Intended Audience:
The instructional level of this session is intermediate. It is intended for a general audience at a post-graduate level; no specific content knowledge is required. I-O psychologists, HR practitioners, and managers who work in the area of selection and assessment may benefit from this session.

Learning Objectives:
This workshop is designed to help participants

- Explain how technology and analytics are driving innovation for assessment design and use
- Evaluate the pros and cons associated with different approaches to high tech assessment
- Describe the advantages and disadvantages of incorporating specific technologies, such as artificial intelligence, into assessment

Presenter Biography:
Dr. Robert E. Gibby is the Chief Talent Scientist for IBM, headquartered in Armonk, New York. In this role, he leads a team of experts focused on creating AI, gaming, assessment, interview and analytics solutions that provide personalized insights and augmented intelligence to candidates, recruiters, interviewers and managers – helping them to make better hiring decisions. As a Talent Scientist, he has developed skill and expertise in the areas of HR technology, talent management, job analysis/skills frameworks, people analytics, engagement, and HR system design. For his work in assessments, Robert has received multiple industry awards, including the 2013 (inaugural) SHRM/SIOP HRM Impact Award and HR Executive Magazine’s Best Ideas for 2009 – HR Technology. Outside IBM, Robert has served as a board member guiding I-O program and curriculum development and taught several undergraduate and graduate courses. He is a Fellow of the Society for Industrial-Organizational Psychology and actively contributes to the field through board/council memberships, publications, and conferences/speaking engagements. Robert earned his PhD in Industrial-Organizational Psychology from Bowling Green State University.

Dr. Matthew Neale is the Chief Psychology Officer for Revelian, a developer of on-line game-based assessments for recruitment. Matthew provides leadership for a team of psychologists, engineers and other professionals in the design, development and validation of engaging game-based psychometric assessments that provide insight into candidate abilities such as cognitive ability, problem solving ability and emotional intelligence. Matthew has worked in talent acquisition, HR, and assessment R&D. Matthew is a regular contributor to international conferences on psychology, talent assessment and selection. He holds a Masters in Organisational Psychology as well as a PhD in Management. Matthew is the Chair of the College of Organisational Psychologists in his home state of Queensland, Australia, and plays a significant role in promoting the profession of Organisational Psychology.
Faisal Ahmed is the CTO and Co-founder of Knockri, and a leader in AI and Algorithmic Fairness. As CTO, he drives Knockri's entire product vision and leads a team of software developers, product managers & machine learning engineers to develop AI algorithms that quantify soft skill attributes such as Growth Mindset & Empathy from video. In addition to managing the team, Faisal works on building the core architecture of Knockri's AI algorithms. His areas of expertise are in Computer Vision, Deep Learning, Multi-Modal analysis & Algorithmic Fairness. Faisal completed his Master’s in Information from the University of Toronto in 2015 and works closely with Toronto's prestigious Vector Institute - Established by Geoffrey Hinton.

Workshop #2 2019 Leading Edge Consortium

Title: What Do We Know, Think We Know, and Know We Don’t Know? Insights from the Latest Multidisciplinary Research on Assessment

Presenters: Ann Marie Ryan, Michigan State University; Anthony S. Boyce, Amazon

Workshop Description:
This workshop will highlight research from multiple disciplines relevant to the assessment space. The workshop will provide I-O psychologists and HR professionals with a brief update on recent research for "Old School Assessment" tools and approaches, as well as dive into the latest research on top assessment trends, such as: OnDemand Video Interviews, Multimedia Simulations, Modularization, Gamification, Mobile, etc. We will also discuss the impact of research from other disciplines. Besides summarizing what is new, the workshop will identify key gaps in our knowledge and discuss how multidisciplinary research can help broaden our thinking about the future of selection.

Intended Audience:
The instructional level of this session is intermediate. It is intended for a general audience at a post-graduate level; no specific content knowledge is required. I-O psychologists, HR practitioners, and managers who work in the area of selection and assessment may benefit from this session.

Learning Objectives:
This workshop is designed to help participants:

- Derive practical insights from the last 2-3 years of talent assessment research
- Identify emerging ideas from research in other disciplines that have strong applicability for talent assessment
- Forecast future trends and needs related to the evolving assessment landscape based on the state of the research
- Apply knowledge from the current state of the science to critically evaluate talent assessment market offerings

Presenter Biography:

Dr. Ann Marie Ryan is a professor of organizational psychology at Michigan State University. She earned her PhD in Organizational Psychology from the University of Illinois Chicago. Dr. Ryan’s major research interests involve improving the quality and fairness of employee selection methods, and topics related to diversity and justice in the workplace. In addition to publishing extensively in these areas, she regularly consults with organizations on improving assessment processes and fairness of workplace practices. Dr. Ryan is a past president of the Society of Industrial and Organizational Psychology, past editor of the journal Personnel Psychology, former associate editor of American Psychologist and currently serves on the editorial boards of a
number of journals. In 2011 she received the Distinguished University Professor Award from MSU. In 2013 she received SIOP’s Distinguished Teaching Contributions Award as well as the Academy of Management’s Sage Award for Outstanding Scholarly Contributions to the Study of Diversity. In 2018 she received the Raymond D. Fowler Award from APA in recognition of outstanding mentoring. She is a fellow of SIOP, the American Psychological Society, and the American Psychological Association (Divisions 5 & 14). Her expertise has led to her service on numerous technical advisory boards, National Academy of Science committees, and other roles related to assessment and selection.

Dr. Anthony S. Boyce is a principal research scientist at Amazon. In this role, he helps set and execute global pre-hire talent assessment strategy to support the continued growth of Amazon’s 650K+ employee workforce. Previously, Tony was a partner in Aon’s Assessment Solutions practice where he directed a team of PhD’s, data scientists, and other colleagues to develop assessment and leadership strategies, tools, and points-of-view that help organizations identify, develop, and retain top talent. He has been the recipient of several industry awards for his collaborative research innovations in the assessment space and has published several book chapters and journal articles on related topics. Tony received his Ph.D. in Industrial-Organizational Psychology from Michigan State University.

Workshop #3 – 2019 Leading Edge Consortium

Title: Validation Meets Innovation: Doing Selection Right in the 2020’s

Presenters: Nancy T. Tippins, Nancy Tippins Group, LLC; Fred Oswald, Rice University; S. Mort McPhail

Workshop Description:
This workshop will explore issues related to job analysis, test development, criterion development, and validation as they apply to new assessment tools (e.g., selection procedures based on artificial intelligence, facial recognition, performance in games) that are emerging in our field. The content of this workshop is designed to help I-O psychologists and HR professionals to refresh their practitioner skills, expand their knowledge base, and highlight areas in which best practices have not yet been defined, and will be grounded in existing legal and professional guidelines. The presenters will consider each step in the test validation process for traditional selection tools and discuss how they apply to new forms of employee selection.

Intended Audience:
The instructional level of this session is intermediate. It is intended for a general audience at a post-graduate level that is well informed of the validation process. I-O psychologists, HR practitioners, and managers who work in the area of selection and assessment may benefit from this session.

Learning Objectives:
This workshop is designed to help participants:

- Identify and describe factors relevant to developing and validating employee selection procedures consistent with legal and professional guidelines when non-traditional assessment tools are used
- Discuss substantive issues affecting validation data collection and analyses, including threats to appropriate inferences
- Recognize barriers and facilitators in the implementation and use of new assessment tools
- Recognize the legal risks associated with validation approaches often used with innovative selection procedures
Presenter Biographies:

**Dr. Nancy Tippins** is a Principal of the Nancy T. Tippins Group, LLC, where she brings more than 30 years of experience to the company. She manages teams that develop talent acquisition strategies related to work force planning, sourcing, acquisition, selection, competency identification, succession planning, and employee and leadership development. Dr. Tippins also conducts executive assessments and coaching and provides expert support in litigation. Active in professional affairs, Dr. Tippins has a long-standing involvement with the Society for Industrial and Organizational Psychology where she served as President (2000-2001). In addition, she served on the Ad Hoc Committee on the Revision of the *Principles for the Validation and Use of Personnel Selection Procedures* (1999) and co-chaired the committee for the 2018 revision of the *Principles*. She served as one of the U.S. representatives on the ISO 9000 committee to establish international testing standards. She also served on the Joint Committee to revise the *Standards for Educational and Psychological Tests* (2014). Dr. Tippins has authored numerous articles on tests and assessments. Recently, she co-authored *Designing and Implementing Global Selection Systems*, co-edited the *Handbook of Employee Selection*, and another edited volume, *Technology Enhanced Assessments*. She has served as the associate editor for the Scientist-Practitioner Forum of *Personnel Psychology* and editor of SIOP’s *Professional Practice Series*. She is currently on the editorial boards of the *Journal of Applied Psychology*, *Personnel Psychology, Industrial and Organizational Psychology: Perspectives on Science and Practice*, *Journal of Psychology and Business*, *Personnel Assessment and Decisions*, and the *International Journal of Selection and Assessment*. Dr. Tippins received her MS and PhD in Industrial and Organizational Psychology from the Georgia Institute of Technology. She is a fellow of SIOP (Division 14 of the American Psychological Association - APA), Division 5 (APA), the American Psychological Association (APA), and the American Psychological Society (APS) and is an active participant in several private industry research groups.

**Dr. Frederick L. Oswald** (Professor, Rice University; PhD, University of Minnesota, 1999) has substantive and analytic expertise centered around the areas of personnel selection, college admissions, military selection and classification, and school-to-work transitions. Methodologically, he publishes research in the areas of meta-analysis, adverse impact, measure development, psychometrics, and big data. Currently, Fred is a Senior Associate Editor of *Journal of Management*, and an Associate Editor of *Psychological Methods*, and *Advances in Methods and Practice in Psychological Science*. He is the past President of the Society for Industrial and Organizational Psychology (SIOP, 2017-2018), a Fellow of APA (Div. 5, 8, 14), and APS, and a member of the National Academies Board of Human Systems Integration (BOHSI). For more information, see [workforce.rice.edu](http://workforce.rice.edu).

**Dr. S. Morton McPhail** practiced Industrial/Organizational Psychology for more than 35 years before retiring in 2013. He received his BA in Psychology from Trinity University in San Antonio and masters and doctoral degrees in I-O from Colorado State University. Dr. McPhail co-founded the consulting firm of Jeanneret & Associates and after mergers became a Senior Vice President with Valtera and subsequently with CEB until his retirement. During his career, he consulted with clients on a wide variety of issues, including development and validation of selection systems in both private and public sector organizations and served as an expert in litigation. Dr. McPhail is a Fellow of the Society for Industrial and Organizational Psychology, served as its Secretary-Financial Officer from 2009-2011 and as President (2016-2017). He has published and presented on numerous topics, including editing a book in SIOP’s Professional Practice Series on validation strategies. He is adjunct faculty for the University of Houston and Rice University and serves on the editorial boards of SIOP’s Professional Practice book series and the journal *Industrial and Organizational Psychology: Perspectives on Science and Practice*. 