REFERENCES

1] L. Lei, J. Hao, A. von Davier, P. Kyllonen, and J-D. Zapata-Rivera. “A

tough nut to crack: Measuring collaborative problem solving.” Handbook

of Research on Technology Tools for Real-World Skill Development. IGI

Global, 2016. 344-359. Web. 28 Aug. 2018. doi:10.4018/978-1-4666-

9441-5.ch013

[2] P. Cipresso, “Modeling behavior dynamics using computational

psychometrics within virtual worlds,” *Frontiers in Psychology*, vol. 6, no.

1725, p. 22, 6 November 2015.

[3] P. Chopade, K. Stoeffler, S. M. Khan, Y. Rosen, S. Swartz, and A. von

Davier, “Human-Agent assessment: Interaction and sub-skills scoring for

collaborative problem solving,” in: Penstein Rosé C. et al. (eds) *Artificial*

*Intelligence in Education. AIED 2018. Lecture Notes in Computer*

*Science*, vol 10948, pp 52-57, June 2018 Springer, Cham, DOI

<https://doi.org/10.1007/978-3-319-93846-2_10>

[4] P. Chopade, S. M. Khan, K. Stoeffler, D. Edward, Y. Rosen, and A. von

Davier, “Framework for effective teamwork assessment in collaborative

learning and problem solving,” *in 19th International Conference on*

*Artificial Intelligence in Education (AIED),* LAS, The Festival of

learning, ARL workshop “Assessment and Intervention during Team

Tutoring” AIED-2018, vol-2153, pp-48-59, July 2018. CEURWS.

org/Vol-2153/paper6.pdf

[5] P. Chopade, M. Yudelson, B. Deonovic, and A. von Davier, Modeling

Dynamic Team Interactions for Intelligent Tutoring, in Joan Johnston,

Robert Sottilare, Anne M. Sinatra, C. Shawn Burke (ed.) Building

Intelligent Tutoring Systems for Teams (Research on Managing Groups

and Teams, vol. 19) Emerald Publishing Limited, pp.131 - 151, ISBN:

978-1-78754-474-1, September 2018.

https://www.emeraldinsight.com/doi/abs/10.1108/S1534-

085620180000019010

https://books.emeraldinsight.com/page/detail/Building-Intelligent-

Tutoring-Systems-for-Teams/?k=9781787544741

[6] S. Khan, “Multimodal behavioral analytics in intelligent learning and

assessment systems,” in Innovative Assessment of Collaboration.

Methodology of Educational Measurement and Assessment, A. von

Davier, Z. M. and K. P., Eds., Springer, Cham, 2017, pp. 173-184.

[7] S. Polyak, A. von Davier and K. Peterschmidt, “Computational

Psychometrics for the measurement of collaborative problem-solving

skills,” in *Proceedings of ACM KDD conference*, Halifax, Nova Scotia

CANADA, August 2017 (KDD2017), Halifax, Nova Scotia CANADA,

2017.

[8] S. Polyak, A. von Davier, and K. Peterschmidt, “Computational

Psychometrics for the measurement of collaborative problem solving

skills,” *Frontiers in Psychology*, 8, pp.20-29, 2017.

<http://doi.org/10.3389/fpsyg.2017.02029>

[9] W. Camara, R. O’Connor, K. Mattern, and M.Hanson, “Beyond

academics: A Holistic Framework for enhancing education and workplace

success.” *ACT Research Report Series*, 2015 (4). ACT, Inc. 2015.

[10] C. Chen and C. Zhang, “Data-intensive applications, challenges,

techniques and technologies: A survey on Big Data,” *Information*

*Sciences*, vol. 275, pp. 314-347, 2014.

[11] A. Krizhevsky, I. Sutskever, and G. Hinton, “ImageNet classification with

deep convolutional neural networks,” in *NIPS: Advances in Neural*

*Information Processing Systems* 25, 2012.

[12] C. Piech, J. Bassen, J. Huang, S. Ganguli, M. Sahami, L. Guibas and J.

Sohl-Dickstein, “Deep knowledge tracing,” *in NIPS, In Advances in*

*Neural Information Processing Systems*, 2015.

[13] “CNN Convolutional neural network,” Wikipedia,

<https://en.wikipedia.org/wiki/Convolutional_neural_network>

[14] DOE, “Synergistic challenges in data-intensive science and exascale

computing,” Department of Energy, ASCAC Data Subcommittee Report,

March 30, 2013.

[15] R. Moore, B. C., R. Marciano, A. Rajasekar, and M. Wan, “Data-Intensive

computing,” in The Grid: Blueprint for a New Computing Infrastructure,

I. Foster and C. Kesselman, Eds., New York, Morgan Kaufmann

Publishers Inc, ELSEVIER, pp. 105-128, 1998

[16] S. Creese, T. Gibson-Robinson, M. Goldsmith, D. Hodges, Dee Kim, O.

Love, J. Nurse, B. Pike, and J. Scholtz, “Tools for understanding identity,”

in *Technologies for Homeland Security (HST), 2013 IEEE International*

*Conference*, Nov 2013.

[17] “Organization for Economic Cooperation and Development (OECD),”

PISA 2015 draft collaborative problem-solving framework., 2015.

[18] G. Grover, M. Bienkowsk, A. Tamrakar, B. Siddiquie, D. Salter, and A.

Divakaran, “Multimodal analytics to study collaborative problem solving

in pair programming,” in *LAK '16 Proceedings of the Sixth International*

*Conference on Learning Analytics & Knowledge*, 2016.

[19] A. von Davier, “Computational Psychometrics in support of collaborative

educational assessments,” *Journal of Educational Measurement*, vol. 54,

pp. 3-11, 2017.

[20] A. von Davier, “Virtual and collaborative assessments: Examples,

implications, and challenges for educational measurement.,” in Invited

Talk at the Workshop on Machine Learning for Education at International

Conference of Machine Learning, Lille, France, 2015.