Caleb Vatral
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Professional Preparation

Institution	Location	Area of Study	Degree	Year
Eastern Nazarene College	Quincy, MA	Computer Science, Mathematics	B.S.	2019
Vanderbilt University	Nashville, TN	Computer Science	Ph.D.	Exp. 2024

Appointments

From – To	Position Title, Organization, and Location
2020 – Present	Research Assistant, Vanderbilt University Nashville, TN
2019 – 2020	Teaching Assistant, Vanderbilt University Nashville, TN
2018 – 2018	Data Science Intern, HCL Technologies Cary, NC
2016 – 2019	Teaching Assistant, Eastern Nazarene College Quincy, MA

Products

Vatral, C., Mohammed, N., Biswas, G., Goldberg, B.S. (2022). Automated Assessment of Team Performance Using Multimodal Bayesian Learning Analytics. To appear in *Proceedings of the 2022 Interservice/Industry Training, Simulation and Education Conference (I/ITSEC)*. National Training and Simulation Association.

Vatral, C., Biswas, G., Cohn, C., Davalos, E., & Mohammed, N. (2022). Using the DiCoT framework for integrated multimodal analysis in mixed-reality training environments. *Frontiers in Artificial Intelligence*, *5*.

Vatral, C., Biswas, G., Goldberg, B.S. (2022). Multimodal Learning Analytics Using Hierarchical Models for Analyzing Team Performance. In *Proceedings of the 15th International Conference on Computer Supported Collaborative Learning (CSCL)* (pp. 403-406). International Society of the Learning Sciences.

Vatral, C., Mohammed, N., Biswas, G., & Goldberg, B. (2022, May). Moving Beyond Training Doctrine to Explainable Evaluations of Teamwork using Distributed Cognition. In *Generalized Intelligent Framework for Tutoring (GIFT) Users Symposium (GIFTSym10)* (p. 127).

Vatral, C., Mohammed, N., & Biswas, G. (2021). A Machine Learning-Based External Assessment Engine for GIFT to Support Team Training in Dismounted Battle Drill Operations. In *TTW@ AIED* (pp. 17-25).

Vatral, C., Mohammed, N., Biswas, G., & Goldberg, B. S. (2021, May). GIFT External Assessment Engine for Analyzing Individual and Team Performance for Dismounted Battle Drills. In *Proceedings of the Ninth Annual GIFT Users Symposium (GIFTsym9)* (p. 107). US Army DEVCOM–Soldier Center.