

Matias Volonte

PERSONAL DATA

Ph.D. Student in Human Centered Computing
201 Pickens Street Apartment 5
Clemson, SC – 29634
Email: volontematias@gmail.com
Website: <http://www.matiasvolonte.com/>

EDUCATION

Ph.D., Clemson University, 2020 (expected), Human Centered Computing
M.S, Clemson University, 2012, Digital Production Arts
B.S., Blas Pascal University, 2009, Bachelors in Audiovisual Communication

PROFESSIONAL EXPERIENCE

CECAS Clemson University, 2014-2017, Videographer, PROMO Department
Metrovision (Disney Latin America), 2012-2014, Technical Director - Tools
developer

MEMBERSHIPS

Member, Institute of Electrical and Electronics Engineers, IEEE (2019-Present)

PROFESSIONAL ACTIVITIES

Reviewer, Transactions on Visualization and Computer Graphics
Reviewer, International Symposium on Mixed and Augmented Reality 2020
Reviewer, ACM Symposium on Applied Perception, 2019-2020
Reviewer, IEEE Conference on Virtual Reality and 3D User Interfaces 2017-2020
Reviewer, Conference on Tangible, Embedded and Embodied Interaction 2019
Reviewer, PLOS ONE 2017
Reviewer, Editorial Manager - VIRE – Springer 2017

PUBLICATIONS

Refereed Journal Publications

- [1] **Volonte, M.**, Reza G. Anaraky, R. Venkatakrisnan, R. Venkatakrisnan, Andrew P. Duchowski, Bart P. Knijnenburg and Babu, S.V., 2020. Empirical Evaluation and Pathway Modeling of Visual Attention to Virtual Humans in an Appearance Fidelity Continuum. Springer, 2020 (Publication process)
- [2] Liu, K.Y., Volonte, M., Hsu, Y.C., Babu, S.V. and Wong, S.K., 2019. Interaction with proactive and reactive agents in box manipulation tasks in virtual environments. *Computer Animation and Virtual Worlds*, 30(3-4), p.e1881.
- [3] **Volante, M.**, Babu, S.V., Chaturvedi, H., Newsome, N., Ebrahimi, E., Roy, T., Daily, S.B. and Fasolino, T., 2016. Effects of virtual human appearance fidelity on emotion contagion in affective inter-personal simulations. *IEEE transactions on visualization and computer graphics*, 22(4), pp.1326-1335. TVCG acceptance rate of 12.6%.

Conference Proceedings (Reviewed)

- [4] **Volonte, M.**, Hsu, Y-C., Liu, K-Y., Mazer, J., Wong, S-K., Babu, S.V. (2020) Effects of Interacting with a Crowd of Virtual Humans on Users' Affective and Non-Verbal Behaviors, accepted as a conference paper in the *Proceedings of the IEEE International Conference on Virtual Reality and 3D User Interfaces (IEEE VR) 2020*, Atlanta, USA, p. 1-9.
- [5] Venkatakrishnan, R., Venkatakrishnan, R., Bhargava, A., Lucaites, K., Solini, H., Volonte, M., Robb, A., Babu, S.V., Lin, W.C. and Lin, Y.X., 2020, March. Comparative Evaluation of the Effects of Motion Control on Cybersickness in Immersive Virtual Environments. In *2020 IEEE Conference on Virtual Reality and 3D User Interfaces (VR)* (pp. 672-681). IEEE.
- [6] Venkatakrishnan, Rohith, Roshan, Venkatakrishnan, Bhargava, Ayush, Lucaites, Kathryn, Solini, Hannah, Volonte, Robb, Andrew, M., Lin, Lin, Wen-Chieh, Babu, V. Sabarish, 2020. A Structural Equation Modeling Approach to Understand the Relationship between Control, Cybersickness and Presence in Virtual Reality. *Proceedings of IEEE VR*
- [7] **Volonte, M.**, Duchowski, A.T. and Babu, S.V., 2019, July. Effects of a Virtual Human Appearance Fidelity Continuum on Visual Attention in Virtual Reality. In *Proceedings of the 19th ACM International Conference on Intelligent Virtual Agents* (pp. 141-147). ACM. Acceptance rate of 20%.
- [8] **Volonte, M.**, Anaraky, R.G., Knijnenburg, B., Duchowski, A.T. and Babu, S.V., 2019, September. Empirical Evaluation of the Interplay of Emotion and Visual Attention in Human-Virtual Human Interaction. In *ACM Symposium on Applied Perception 2019* (p. 1). ACM.
- [9] Brickler, D., Volonte, M., Bertrand, J.W., Duchowski, A.T. and Babu, S.V., 2019, March. Effects of Stereoscopic Viewing and Haptic Feedback, Sensory-Motor Congruence and Calibration on Near-Field Fine Motor Perception-Action Coordination in Virtual Reality. In *2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR)* (pp. 28-37). IEEE.
- [10] Venkatakrishnan, R., Volonte, M., Bhargava, A., Solini, H., Venkatakrishnan, R., Robb, A.C., Babu, S.V., Lucaites, K.M. and Pagano, C., 2019, March. Towards an Immersive Driving Simulator to Study Factors Related to Cybersickness. In *2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR)* (pp. 1201-1202). IEEE.
- [11] **Volonte, M.**, Robb, A., Duchowski, A.T., and Babu, S.V. (2018). "Empirical Evaluation of Virtual Human Conversational and Affective Animations on Visual Attention in Inter-Personal Simulations," in the *2018 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)*, p. 25-32.
- [12] Inks, Z.J., Volonte, M., Beadle, S., Horing, B., Robb, A.C., and Babu, S.V. (2018). "Towards Standardization of Medical Trials Using Virtual Experiments," in the *2018 IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)*, p. 585-586.

PRESENTATIONS

- [1] “High Fidelity Virtual Environments” *Keynote Speaker, Virtual Humans Speaker*, University of Mississippi, June 2020
<https://www.youtube.com/watch?v=uPN7BrxNchk>
- [2] “Networking UBP” *Keynote Speaker, Virtual Reality Specialist*, Universidad Blas Pascal Argentina, October 2019
- [3] “Global Health at an Age of Information and Technology” *Invited Speaker Virtual Human for Medical Training*, Universidad De Costa Rica, Costa Rica, June 2019
- [4] “IEEEVR 2016: Eye Tracking in Desktop VR: Data Synchronization, Capture, Visualization, and Analysis”, Tutorial presentation, IEEEVR 2016, Greenville, South Carolina, March 2016.

STUDENT MENTORING

- [1] Anand Saral (Graduate), 05/2020 - Currently
- [2] Elizabeth Schlesener (Graduate), 05/2020 - Currently
- [3] Reagan Burke (Graduate), 05/2020 - Currently
- [4] Blake Washburn (Undergraduate), 08/2019 – 12/2019
- [5] Pratyush Singh (Graduate), 01/2019 – 08/2019
- [6] Jacob Thompson (Undergraduate), 05/2015 - 08/2015

HONORS AND AWARDS

- [1] Outstanding PhD. Student in Human-Centered Computing, May 2020
- [2] Human Factor Institute Travel Grant Recipient, 2018-2019
- [3] ACM SIGAI Travel support (Granted but not accepted), 2018

TEACHING

Courses Taught

- [1] CPSC 8070, Introduction to 3D Animation in Blender, Clemson University, Department of Computer Science, 2018
- [2] DPA 307, 3D Production Pipeline, Clemson University, Department of Computer Science, 2011-2012

UNIVERSITY AND PUBLIC SERVICE

- [1] Clemson University, School of Computing Student Graduate Ambassador

IN THE NEWS

- [1] “*Interview with Universidad Blas Pascal*”, Universidad Blas Pascal (2014): <https://www.ubp.edu.ar/novedades/matias-volonte-un-cordobes-dedicado-las-artes-visuales>
- [2] “*Metegol Movie*” (2013), I was interviewed by the biggest newspaper in Cordoba, Argentina regarding the movie I was working on at the time (Spanish): <https://vos.lavoz.com.ar/cine/cordobesa-metegol/>
- [3] “*Foosball*”, (2013), Interview with Universidad Catolica Argentina: <https://www.youtube.com/watch?v=XAYmn5C6mIs>