

Education

- 2022 **University of Nevada, Reno, NV, United States**
(Expected) Ph.D. in Computer Science and Engineering
- 2019 **University of Nevada, Reno, NV, United States**
M.Sc. in Computer Science and Engineering
- 2016 **Eritrea Institute of Technology, Asmara, Eritrea**
B.Sc. in Computer Engineering

Honours & Awards

- 2021 **Graduate Access Grant**, University of Nevada, Reno
- 2021 **Google CS Research Mentorship Program Mentee**, Google
- 2020 **Graduate Access Grant**, University of Nevada, Reno
- 2020 **Graduate Student Association Travel Award**, University of Nevada, Reno
- 2018 **Summer Tuition Award (Not Accepted)**, University of Nevada, Reno
- 2017-2018 **Graduate Dean's Fellowship**, University of Nevada, Reno
- 2017 **CS Graduate Student Scholarship (Not Accepted)**, University of Houston
- 2016 **Great Distinction Honor**, Eritrea Institute of Technology

Selected Publications

Journal Papers **I. B. Adhanom**, M. Al Zayer, P. MacNeilage, E. Folmer. 2021. Field-of-View Restriction to Reduce VR Sickness Does not Impede Spatial Learning in Women. *ACM Transactions on Applied Perception (TAP)*. 18, 2, 1-17.

A. Prithul, **I. B. Adhanom**, E. Folmer. 2021. Teleportation in Virtual Reality; A Mini-Review. *Frontiers in Virtual Reality*. 2. 138.

I. B. Adhanom, P. MacNeilage, E. Folmer. 2021. Eye-tracking in Virtual Reality: a Broad Review of Applications and Challenges. *Virtual Reality*. *In review*.

Refereed Full Papers A. Prithul, **I. B. Adhanom**, E. Folmer. 2021. Embodied Third-Person Virtual Locomotion using a Single Depth Camera. In *Proceedings of Graphics Interface (GI 2021)*.

I. B. Adhanom, S. C. Lee, E. Folmer, P. MacNeilage. 2020. GazeMetrics: An Open-Source Tool for Measuring the Data Quality of HMD-based Eye Trackers. In *Proceedings of Symposium on Eye Tracking Research and Applications (ETRA '20)*. 645-652.

I. B. Adhanom, N. N. Griffin, P. MacNeilage, E. Folmer. 2020. The effect of a foveated field-of-view restrictor on VR sickness. In *2020 IEEE conference on virtual reality and 3D user interfaces (IEEEVR '20)*. 1-5.

M. Al Zayer, **I. B. Adhanom**, P. MacNeilage, E. Folmer. 2019. The effect of field-of-view restriction on sex bias in vr sickness and spatial navigation performance. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019)*. 1-12.

Workshop Papers & Posters P. Pavilonis, **I. B. Adhanom**, M. R. Taylor, L. Netzel, M. Kelly, D. Hopfe, N. Constantino, FACSM, N. G. Murray. 2021. Virtual Reality application for the Vestibular/Ocular Motor Screen: a comparison with a novel prototype. In Annual Meeting of the American College of Sports Medicine (ACSM).

I. B. Adhanom. 2021. Towards Universal VR Sickness Mitigation Strategies. In 2021 IEEE Conference on Virtual Reality and 3D User Interfaces

Preprints **I. B. Adhanom**, E. M. Hand. 2019. A First Look into Neural Machine Translation for Tigrinya. Preprint, To be submitted to the ACM Transactions on Asian and Low-Resource Language Information Processing

Selected Experience

- 2018 – Now **University of Nevada, Reno**, *Graduate Research Assistant*, Reno, NV.
- 2013 – Now **Binogi International**, *Independent Educational Content Developer*.
- 2015 – 2017 **Eritrea Institute of Technology**, *Software Engineer*, Asmara, Eritrea.
- 2013 – 2017 **Emmanuel IT Solutions Provider**, *Software Engineer*, Dekemhare, Eritrea.
- 2008 – 2009 **Dekemhare Comprehensive Secondary School**, *Instructor*, Dekemhare, Eritrea.

Teaching Experience

- 2021 **University of Nevada, Reno**, *Co-Lecturer for CS484/684 Virtual Reality Course*, Reno, NV.
- 2020 **University of Nevada, Reno**, *Teaching Assistant for CS484/684 - Virtual Reality*, Reno, NV.
- 2008-2009 **Dekemhare Comprehensive Secondary School**, *Instructor of the Information & Communication Technology Class*, Dekemhare, Eritrea.

Selected Presentations

- 2021 GazeMetrics: An Open-Source Tool for Measuring the Data Quality of HMD-based Eye Trackers, ETRA 2021, Invited Talk (Planned)
- 2021 Towards Universal VR Sickness Mitigation Strategies, IEEEVR 2021, Doctoral Consortium
- 2021 The Effect of a Foveated Field of Restrictor on VR Sickness, IEEEVR 2020
- 2020 Measuring the Spatial Accuracy and Precision of VR HMD-based Eye Trackers, Smith Kettlewell Eye Research Institute, Invited Talk

Academic Service

- Reviewer** ETRA2021, IEEEVR2021, CHI2020, VRST2020
- Web Chair** ISVC2018, ISVC2019, ISVC2020, ISMCO2019, ISMCO2020
- Community** Coding Instructor for NSF GAIN Scholars, University of Nevada, Reno (*August 2021*)
- Service** Scholars are selected Ph.D. students who are first-generation or from historically underrepresented backgrounds.

Students Mentored

- 2019-2020 **Ceslee Montgomery**, Graduate Student, Georgia Tech, Mentored Through BlackInAI
- 2020 **Andrea Estep**, Undergraduate CS Student, University of Nevada, Reno
- 2020 **Trevor Olsen**, Undergraduate CS Student, University of Nevada, Reno
- 2020 **Frederick Shafer**, Undergraduate CS Student, University of Nevada, Reno