

McGMI Degree program is celebrating Alum's Family Donation & 15 years being part of the GMI Program

In 2007, an incredible opportunity was provided to the Computer Science's *VR and Graphics Program* when McGMI degree program was approved as Master of Engineering at the EAS College. *VR and Graphics Program* added interdisciplinary options to attract those students who would normally not join Computer Science Department. These students were interested in technical side of animation, visualization, VR, and Graphics work from creative artist's point of view and wanted to be part of games and media integration work. Since then, McGMI degree (aka MSCS-GMI) program has recoded phenomenal success in achieving this goal: graduating 15-students from the program in last 15 years, and creating new work on bullying, autonomous car navigation theory, work on improving workplace accommodation, Empathy Training, and developing game platforms to study sense of Fear and Anxiety.

The GMI Program is also celebrating receiving generous donation: a \$50K gift to CU-foundation from the family of a McGMI degree program's Alum. Beneficiary of this generous donation is PhD student Khalid Alharbi who completed his MS some years and has returned to complete his doctoral work from Kingdom of Saudi Arabia.

In 2008, *VR and Graphics Program* also adopted the name Media Convergence, Games and Media Integration and uses *THE GMI Program*. *VR and Graphics Lab* also adopted the name *THE GMI Lab*. On the strength of its founder Dr. Semwal's record, the GMI Program has graduated 7 Ph.D. and 119 M.S. students in Computer Science, including 15 MSCS-McGMI *degree* program students with a total of 136 technical paper publications. The GMI Program has built MSCS-GMI (McGMI) degree around highly interdisciplinary interactions *outside* EAS. Many GMI program students complete interdisciplinary graduate work with mentors from Visual and Performing Arts (VAPA), Music, and College of Nursing. Recently our graduate joined Sandia National Lab, Albuquerque, NM and published at a very highly rated SIGGRAPH Asia 2021 Conference in Tokyo. McGMI degree program has graduated estimated 15 students with 85% (18/21) retention based on CS Data. The Master of Science Games and Media Integration (McGMI) program has attracted a total of about 21 new students who would normally not consider joining Engineering/Computer Science as graduate students. These students are interested in the creative professional careers in the Animation industry. This multi-billion-dollar industry is a highly interdisciplinary field requiring expertise in games, animation, and the entertainment domains, with ties to similar strong programs at universities like Los Angeles (UCLA, USC), Boston, and Florida; Students interested in this area are pursuing high-paying competitive careers in companies like Disney Animation, Pixar Movies, etc. Besides expertise in computer animation and programming, these industries prefer students with creative background from the LAS fields. April

The GMI Program supports 9 MSc and PhD level courses in Computer Science in the areas: Computer Graphics, Complex Systems, Wearable Computing, Computer Algorithms, Virtual Reality and XR (AR/VR/MR)¹ technologies, and Human Computer Interaction (HCI). GMI Lab's research focus is highly inter-disciplinary and has active collaboration across the Engineering College, Helen and Arthur E Johnson Beth-El College of Nursing and Health Sciences, Letters Arts and Sciences (LAS), Visual and Performing Arts, Department of Music, and UCCS Theatre-works™ and is member of ICORE (aka IASP www.iasp.uccs.edu).

2021 onwards, the GMI Program has also teamed with UCCS-IASP² to expand on its *Media Convergence* theme which is all about Complex Systems. Within two years of being formed, UCCS-IASP (aka ICORE) – a HUB of complex systems studies -- has over 40 affiliated members including 34 Faculty and Staff from four colleges, three students, and five external members. Four years ago, the GMI Program started working with 10 faculty members to form XR and Complex Systems. This group has joined UCCS-ICORE towards a goal of establishing a highly interdisciplinary PhD in Complex Systems in future. The GMI Program's George Mudrak (Impatience on Automatic Decision making & Urban Infrastructure Management) was the most recent (2020) PhD thesis completed by the GMI Program student in Complex Systems. Since 2021, the McGMI degree Program has also launched highly successful online version of CS 7060 (GMI Portfolio) on Complex Systems, generating 33 new credit hours. McGMI degree program is offering 50-50 option, a balance between online and in person course completion.

[April 17, 2023: Compiled by Dr. Sudhanshu Kumar Semwal on behalf of the GMI Program hosting MSCS-GMI (McGMI Degree) for 15years since 2007. For information purpose only. All Rights Reserved.]

¹ Extended Reality (XR), Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR).

² Interdisciplinary Academic Studies Program (IASP) soon to be re-named as ICORE (interdisciplinarity & complexity-oriented researchers and educators).