

## Mohamed Hassan

AI Scientist, Electronic Arts  
Redwood City, California, USA  
<https://mohamedhassanmus.github.io>

### Contact

Email: mohamed.hassan.mus@gmail.com

### Education

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|-------------------|--|
| 10/2017 - 06/2022 | Max Planck Institute for Intelligent Systems - Germany<br><i>Ph.D., Computer Science</i><br><i>Thesis: Reconstruction and Synthesis of Human-Scene Interaction</i>     |
| 09/2015 - 05/2017 | American University of Sharjah - UAE<br><i>M.S., Mechatronics Engineering, CGPA 3.87</i><br>Thesis: Multiple Proposals for Continuous Arabic Sign Language Recognition |
| 09/2008 - 08/2013 | University of Khartoum - Sudan<br><i>B.Sc., First Class (honors), Electrical &amp; Electronics Engineering</i><br>Ranked First in the division                         |

### Experience

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|-------------------|---|
| 09/2022 - present | Electronic Arts, USA<br><i>AI scientist</i><br>Real-time animation, motion authoring and editing, 3D generative models, knowledge distillation, real-time inference, and LLMs |
| 06/2021 - 05/2022 | NVIDIA Toronto AI Lab, Canada<br><i>Intern (virtual)</i><br>Generalization of physics-based animation to unseen scenarios   |
| 07/2020 - 11/2020 | Creative Intelligence Lab - Adobe Research, USA<br><i>Intern (virtual)</i><br>Synthesizing scene-aware animation with diverse styles  |
| 06/2016 - 09/2016 | Advanced Digital Science Center of Illinois at Singapore, Singapore<br><i>Junior Research Assistant</i><br>Developing visual SLAM   |
| 09/2015 - 05/2017 | American University of Sharjah, UAE<br><i>Graduate Teaching Assistant</i><br>Sign language recognition, gender and facial expression recognition, and visual SLAM             |
| 03/2014 – 09/2015 | Electro-optics Research Center, Sudan<br><i>Software Engineer,</i><br>Image segmentation and object tracking  |
| 09/2013 – 09/2014 | University of Khartoum, EEE department, Sudan<br><i>Teaching Assistant</i>  |

## **Publications**

Synthesizing Physical Character-Scene Interactions. SIGGRAPH 2023

**Mohamed Hassan**, Yunrong Guo, Tingwu Wang, Michael Black, Sanja Fidler, Xue Bin Peng

Stochastic Scene-Aware Motion Prediction. ICCV 2021.

**Mohamed Hassan**, Duygu Ceylan, Ruben Villegas, Jun Saito, Jimei Yang, Yi Zhou, and Michael Black

Populating 3D Scenes by Learning Human-Scene Interaction. CVPR 2021.

**Mohamed Hassan**, Partha Ghosh, Joachim Tesch, Dimitrios Tzionas, Michael J Black

Generating 3D People in Scenes without People - CVPR 2020

Yan Zhang, **Mohamed Hassan**, Heiko Kim Neumann, Michael J Black, Siyu Tang

Resolving 3D human pose ambiguities with 3D scene constraints - ICCV 2019

**Mohamed Hassan**, Vasileios Choutas, Dimitrios Tzionas, Michael J Black

Multiple Proposals for Continuous Arabic Sign Language Recognition - Sensing and Imaging 2019

**Mohamed Hassan**, Khaled Assaleh, Tamer Shanableh

User-dependent Sign Language Recognition Using Motion Detection - CSCI 2016

**Mohamed Hassan**, Khaled Assaleh, Tamer Shanableh

## **Awards and Certificates**

Singapore International Pre-Graduate Award (SIPGA), 2016.

Top student in Electronic and Computer Systems division, University of Khartoum, 2013.

Best graduation project, Title "Design and Implementation of Self Driving Vehicle", The Sudanese Engineering Association, 2012/2013

Award of Distinction, 9th of the top one hundred students in secondary school examination, PETRONAS Sudan, 2008

## **Teaching Experience (TA)**

### Graduate Courses

Embedded Systems for Mechatronics, American University of Sharjah, Fall 16

Advanced Engineering Math, American University of Sharjah, Spring 16

### Undergraduate Courses

Electrical Circuits I, American University of Sharjah, Spring '16

Dynamics & Control Systems Laboratory, American University of Sharjah, Fall 15, Spring 16, Fall 16, Spring 17

Computer Applications in Mechanical Engineering I, American University of Sharjah, Spring 17

Control Systems, American University of Sharjah Fall 15

**Technical SKILLS**

- Programming languages: Python, C#, and C++.
- Unity3D