

# Muhammad Bin Tahir Mir

Technical Artist | Character TD  
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## EDUCATION

### CARNEGIE MELLON UNIVERSITY, ENTERTAINMENT TECHNOLOGY CENTER (ETC)

MASTER OF ENTERTAINMENT  
TECHNOLOGY

Graduating May '20 | Pittsburgh, USA  
Cum. GPA: 3.57 / 4.0

### LAHORE UNIVERSITY OF MANAGEMENT SCIENCES (LUMS)

BS IN COMPUTER SCIENCE

Graduated May '17 | Lahore, Pakistan

## COURSEWORK

### GRADUATE

Technical Animation  
Building Virtual Worlds  
Visual Story  
Improvisational Acting

### UNDERGRADUATE

Computer Graphics  
Human Computer Interaction  
Topics in Interactive Computing  
Software Engineering  
Advanced Programming  
Computer Vision

## SKILLS

### ART & DESIGN

Tools:

• Maya • Photoshop • Premier Pro

Crafts:

• Rigging • Animation • Illustration

### PROGRAMMING

Languages:

• Python • PyQt & PySide • PyMel  
• HTML • CSS • JavaScript  
• C# • C++

Game Engines & Tools:

• Unity • Perforce • Git

Platforms:

• Vive • Oculus • Kinect

## EXPERIENCE

### CARNEGIE MELLON | UNITY SCRIPTING RESEARCH ASSISTANT

Feb 2019 – Ongoing | Pittsburgh, USA

- Developing a mobile app in Unity for an educational game.

### MANO ANIMATION STUDIOS | TRADITIONAL CHARACTER ANIMATOR

July 2017 – March 2018 | Karachi, Pakistan

- Animated 12 entire shots (30 seconds worth of traditional animation footage) for Pakistan's first hand-drawn animated feature film, 'The Glassworker'.
- Put Disney's 12 Principles of Animation into practice. Strongly familiarized myself with entire traditional animation pipeline.

### KOÇ UNIVERSITY | PYTHON SCRIPTING RESEARCH ASSISTANT

June 2016 – August 2016 | Istanbul, Turkey

- Made use of PyOpenCV, Caffe and the Kinect SDK among other tools to develop a Python desktop application employing a projector and depth-sensing camera to explore possible indoor applications of spatial AR.

## ACADEMIC PROJECTS

### SIRENA - ANIMATED SHORT | CHARACTER TD, TOOL DEVELOPER

Semester Project, Spring 2019 (Ongoing) | ETC, Pittsburgh, USA

- Rigging all characters and props for the film.
- Developing Maya tools for automating processes in the art pipeline.

### BUILDING VIRTUAL WORLDS | 3D GENERALIST, GAME DESIGNER

Course Projects, Fall 2018 | ETC, Pittsburgh, USA

- Worked in interdisciplinary 5-person teams, rapidly prototyping and developing VR and AR experiences (for the HTC Vive, Oculus Leap Motion, Meta II, CAVE) over 2-week sprints after which teams were shuffled.
- Rigged, animated, modelled and textured multiple characters and environment assets in Maya + Successfully imported these assets for use in Unity.

## INDEPENDENT STUDIES

### BIPEDAL RIG | MAYA - Rigging - October 2018

- Implemented a bi-pedal rig from scratch including but not limited to the following features: Flexible spine, FK/IK arms and legs, independent hip movement, reverse feet rig, eye targeting, space-switching IK arms and hand/finger controls.

### CHARACTER DESIGN | PHOTOSHOP - Art Fundamentals - Jan 2018

- Researched principles of character design for 2d animation.
- Drew several iterations on paper, adjusted according to feedback.
- Drew 360 degree turnarounds for the characters.

## HONOURS

- 2018 - CMU ETC Festival Poster Design Competition Winner.
- 2018 - Selected as 1 of Young Sustainable Impact's (YSI) 21 global leaders from a pool of 9000+ applicants to design solutions for sustainability related issues.