## Muhammad Bin Tahir Mir

Technical Artist | Character TD mbintahir.com - mmir@andrew.cmu.edu - 703 705 1628

#### **FDUCATION**

#### 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 After Effects Crafts:
- Rigging Animation Illustration

#### **PROGRAMMING**

Languages:

- Python PyQt & PySide PyMel
- HTML CSS JavaScript
- (# (++

Game Engines & Tools:

- Unity Perforce Git Platforms:
- Vive Oculus Kinect

#### **EXPERIENCE**

#### **GAME DEVELOPMENT RESEARCH ASSISTANT I CMU**

Feb 2019 - Ongoing | Pittsburgh, USA

• Developing a cross-platform mobile app in Unity (C#) geared towards experientially introducing 'Special Relativity' concepts to children.

#### TRADITIONAL ANIMATOR | Mano Animation Studios

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.

#### PROGRAMMING RESEARCH INTERN | Koç University

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**

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

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

- Created an expressive facial rig using joint-driven blendshapes.
- Wrote Maya tools to automate monotonous rigging processes.
- Did concept art, character design and branding for the project.

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

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, modeled and textured multiple characters and environment assets in Maya + Successfully imported these assets for use in Unity.

## INDEPENDENT STUDIES

#### 3D CHARACTER PIPELINE | Maya - 3D Software - March 2019

• Designed, modeled, UV mapped, rigged, posed and rendered a character for mobile. (CLICK HERE TO SEE)

#### 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. (CLICK HERE TO SEE)

## 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.