

# Muhammad Bin Tahir Mir

Technical Artist

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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  
Computer Networking

## SKILLS

### ART & DESIGN

Tools:

• Maya • Photoshop • After Effects  
• DAZ3D • Microsoft Office Suite

Crafts:

• Rigging • Animation • Illustration

### PROGRAMMING

Languages:

• Python (PyQt, PySide, Maya API)  
• HTML • CSS • JavaScript  
• C#

Game Engines & Tools:

• Unity • Perforce • Git

Platforms:

• Vive • Oculus • Kinect

## EXPERIENCE

### INTERN PIPELINE TD | DEVELOPMENT DIMENSIONS INTERNATIONAL

June 2019 – August 2019 | Pittsburgh, USA

- Set up character pipeline for DDI's VR experiences using DAZ3D & Unity.
- Wrote tools for Unity allowing seamless import and setup of character assets.
- Prepared extensive documentation for systems built.

### CONTRACT CHARACTER TECHNICAL ARTIST | PROJECT: STAMINA

June 2019 – Ongoing | Remote

- Building an auto-rigger for Maya using Python catering to the project's needs.
- Building several engine-friendly character and facial rigs.

### GAME DEVELOPMENT RESEARCH ASSISTANT | CMU

February 2019 – August 2019 | Pittsburgh, USA

- Developed a cross-platform mobile app in Unity (C#) geared towards experientially introducing 'Special Relativity' concepts to children.
- Published app on App Store and Play Store.

### 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.

### AR DEVELOPMENT 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, storyboards, 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.

## HONORS

- 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.