

Muhammad Bin Tahir Mir

Character Technical Director
mbintahir.com – mmir@andrew.cmu.edu – 703 705 1628

EDUCATION

CARNEGIE MELLON UNIVERSITY, ENTERTAINMENT TECHNOLOGY CENTER (ETC)
MASTER OF ENTERTAINMENT TECHNOLOGY
Graduating May '20 | Pittsburgh, USA

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

MANO ANIMATION STUDIOS | TRADITIONAL CHARACTER ANIMATOR
July 2017 – March 2018 | Karachi, Pakistan

- The work produced by Mano has been recognized by Studio Ghibli, Studio Chizu, TED, IGN, Gamespot and more.
- 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 | RESEARCH ASSISTANT | KUAR DESIGN LAB
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, ART DIRECTOR
Semester Project, Spring 2019 (Ongoing) | ETC, Pittsburgh, USA

- Designed all characters for the film.
- In charge of rigging all characters and props for the film.
- In charge of Maya tool development to automate processes for animators.

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 to be used in-game using Maya.

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, feet that rotate at various points, eye targeting, space-switching IK arms and hand/finger controls.
- Wrote a tool in Python for automating the process of applying constraints on corresponding joints for duplicates of a skeleton.

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.