**MAAC MANIFEST 2017: AN OVERVIEW**

22nd June 2017 was a special day for those at MAAC Chowringhee | Rashbehari | Kakurgachi, as students, faculty and staff alike gathered at the Academy of Fine Arts, Kolkata for a unique experience. Every year, MAAC Kolkata organises the MAAC Manifest, a 3D and VFX seminar hosted with the novel aim of providing a platform for students to gain insight directly from stalwarts of the media world. The organisation of the event is spearheaded by **Mr. Naveen Choudhary**, whose entrepreneurship and dedication facilitated the presence of this year's esteemed speakers: **Mr. Pete Draper**, one of the founders of Makuta Studios, and **Mr. Abir Aich**, AVP-Academics of MAAC India and a media professional for the past 18 years, despite their packed schedules.

There was an air of excitement in the auditorium as everyone gathered for the event. The emcee for the event was Sajan Samuel, and with everyone gathered on time, the inaugural lamp was lit by Mr. Draper, Mr. Aich and Mr. Choudhary shortly after 10AM. The speakers for the day were introduced, and Mr. Draper took the stage.



Makuta Studios, under the supervision of Mr. Draper, most recently worked on the visual effects (VFX) for the blockbuster *Baahubali: The Conclusion*, and the first topic of discussion for the day was on the VFX journey of the film. The *Baahubali* duology has been lauded for its grand visuals, and it wasn't hard to see why as Mr. Draper explained the hard work and lessons that were integral to the development of what we saw on the silver screen. There is a common phrase among some filmmakers, to 'fix it in post(-production)', that Mr. Draper explained was a totally incorrect way to go about VFX. With the sheer magnitude of VFX being used in films these days, it is essential that planning be done from the pre-production stage itself, as the most obvious and important aspect of VFX is the very first word: visual. VFX exists mainly to augment - or add to - the action that the audience sees on the screen, not to 'fix' what went wrong during the production (or in layman's terms, shooting) stage. Also, while VFX helps reduce the costs of production to a great extent by taking away the need to physically create imaginary worlds, it doesn't come cheap; there is equipment to be bought to help the time-consuming digital work that needs to be done. As he put it, creating realistic CG is extremely difficult because in most cases, everyday things are being replicated digitally. As a result, the output that is being delivered needs to be flawless; the smallest missed detail will seem odd to the viewer because what they are seeing is things that they interact with on a daily basis and are intimately familiar with. Everybody is an expert in their own right. With this in mind, Mr. Draper and his team worked closely with the production crew of *Baahubali* in order to plan out shots in a way that would ensure that things could be made to happen seamlessly.



*Baahubali* is an epic two-part film. The VFX for the first film was done primarily by Firefly Studios in Hyderabad, while that for the second was dome mainly by Makuta Studios with Mr. Draper as the supervisor. Look development was crucial for such a grand project, as every kingdom being shown had to be visually distinctive as well as reflect the kind of land it was. Maheshmati was designed to be industrial and overbearing, with repeated use of the elephant motif as their sacred goddess took the form of the elephant. In contrast, Kunthala Rajyam - the home of princess Devasena - was softer and calmer, with more blues and greens in the colour palette. It wasn't just the individual kingdoms that needed planning, but the river that connected them as well; there is a lengthy sequence in the film where Amarendra Baahubali and Princess Devasena travel by a swan boat to Maheshmati on the river, through which we get closer glimpses of the latter kingdom. The landscape of the events of the film was designed and pre-visualised in 3D well before production work began, so that the shooting could be planned efficiently.

As the environments were created digitally and live-action sequences had to be integrated into those environments, it was essential that the real and the virtual matched. Sets had aged since the first film due to human interaction and natural weathering, this had to be reflected in the digital assets as well. A lot of the area models were redesigned to add more detail for the close-up shots. Notable examples Mr. Draper shared were the King's court and the citadel of Maheshmati. A lot of elements, such as pillars, trellises, and the detailing on the Swan Boat, were used as instances or repurposed in a different area of the kingdom to cut down time and maintain uniformity. Not everything is simple to solve, however. The corridor for the arrow dance sequence in Devasena's palace where the camera follows the arrows had to be recreated in 3D after shooting - while the shot was initially slotted for 3-4 days, it took nearly three months to complete! For the fields and forests, it wasn't possible to get live references, so the team had to make do with images from the internet based on which the assets were created for the shots. The rudders on the swan boat had been designed facing the wrong direction, and fixing it was a costly mistake. Each day of shooting had around 30-40 lakh rupees invested, so mistakes had to be avoided as far as possible. Some establishing shots for the kingdoms had to scrapped as well. Six different shades of green were used for chroma shots, and some footage was of poor quality but had to be used properly despite the fact.

VFX is all about illusions and making people believe that the unreal is real. In order to do so, it is important to be practical and grounded in the real. At the same time, cinema is removed from reality and calls for suspension of disbelief. Striking a balance between the two is the biggest challenge, which was best seen in the sequence of Bhallaldeva's statue falling in the climax of the film, and the shot of the arrows zooming down the corridor and killing the soldiers in the arrow dance sequence. The rampart fight sequence, while depicted as a continuous shot in the film, actually used seven cutshots for the actors' actions. Camera tricks, practical effects and digital magic all work together to make the final output.

After explaining the making of the film, Mr. Draper concluded his talk with showreel tips for those 'crazy people' who want to make their career in VFX. The first 15 seconds, he stressed, are the most important to capture the attention of the studio so the best works go in first. The other point he stressed was professionalism: no thanking X, Y, and Z, and if you've collaborated with others for a shot, mention who did what so that your contribution can be focused on. After this, he was presented with a memento and Mr. Aich took the stage to speak about the media industry as a flourishing career option.



With nearly two decades of experience in the media industry, and several years curating content for MAAC's courses to push it to its place as a leading educator in animation, VFX and multimedia, Mr. Aich gave an eye-opening presentation on the media industry and the career options that it presents. While film and VFX is the most obvious and glamorous option when one thinks of a career in media, there are numerous alternate options that are coming to light in this day and age. And that film is the best-paying of media careers is also a myth. For a career in media, one can choose from film, TV, advertising, game development, print media (such as magazines, newspapers) and digital or internet-based media. India has the second-largest internet user base in the world... and As Mr. Aich pointed out, internet access is what makes our smartphones 'smart'. Recent socioeconomic measures implemented by the government have increased the number of smartphone and internet users drastically, generating the need for more content to satisfy these new customers and thereby creating thousands of lucrative job opportunities for aspiring media professionals. Mixed media, too, is a booming industry. There are now smartphone applications and wearables that allow users to combine content from print media with audiovisual media (like videos), or design spaces virtually for demos before construction (a VR-prototype that is being developed by Microsoft), or even visualise consumer goods in spaces like one's home before purchasing them (an initiative by Swedish furniture giant IKEA, which is planning to launch in India very soon)! Students can now use the skills that they learn from their courses at MAAC Kolkata and push boundaries like never before. After all, Mr. Aich noted, most media students will go into careers outside of film and VFX, and learning the opportunities available is essential to deciding the direction you want your career to take.



After the event, both the guest speakers visited MAAC Chowringhee and interacted with the students and faculty and shared more tips. Mr. Draper saw some of the student works on display in the centre, and that inspired him to do a live demonstration by shooting a video on his mobile to explain the need for contrast in tracking and chroma removal. This is a great advantage that students at MAAC Chowringhee | Rashbehari | Kakurgachi have, to interact with the legends of the field directly in the familiarity of their centres and gain invaluable guidance and advice. In past years, we have had people like Tom Alter (renowned actor), Rajiv Chilaka (creator of *Chhota Bheem*), Sanath PC (director of Firefly Studios) and Prasad Sutar (VFX supervisor at NY VFXWalla) share their experiences both onstage at the Manifest and in the centre directly with students and faculty. We are thankful to have Mr. Naveen Choudhary, head of MAAC Kolkata, to thank for pushing relentlessly forward to make these events happen, and we look forward to scaling new heights at next year's Manifest!