

REDCAT



APRIL 12 – 13, 2012 8:30 PM

presented by

REDCAT

Roy and Edna Disney/CalArts Theater

California Institute of the Arts

CaLARTS



KARMETIK
MACHINE
ORCHESTRA

SAMSAARA

Creators

Ajay Kapur, Music Director
Michael Darling, Production Director

Special Guests

Trimpin
Curtis Bahn
Tomie Hahn

Designers

Raakhi Kapur, Production Manager, Choreographer, Story Development
Jason Jahnke, Animation Director
Grant Dunn, Lighting Designer
Paul DiPietro, Technical Direction

Robots

MahadeviBot, GanapatiBot, BreakBot, Raina, Tammy, Rattletron, Jackbox,
Quarterlu, The Bees and The Roboclackers



sam·sa·ra/səm'särə/

The cycle of death and rebirth to which life in the material world is bound. Five ancient Indian fables from the Panchatantra and Jataka Tales have been selected to venture into modern theatrical technology and multimedia production. The KarmetiK Machine Orchestra has been exploring a marriage of tradition and technology with musical robots for over five years. The robots and artists performing tonight embrace technology as a performance technique.

KARMETIK is a think tank of artists and engineers exploring a digital renaissance, seeking to question and redefine the boundaries between music, the visual arts, and technology. KarmetiK hosts a collection of hardware and software researchers interested in combining recent advancements in robotics, human computer interaction, artificial intelligence, and embedded computing to create novel products and new works of digital art. Originally a company focused on the musical arts, KarmetiK continues in this vein by releasing and promoting new music by artists who seek to create and use the latest in sonic technology for composition and performance. Our foremost project is the Machine Orchestra.

Program

1. The Beginning

Music: "Seminya"

Composers: Ajay Kapur and Meason Wiley

Performers: Ajay Kapur (ESitar), Curtis Bhan (ESitar & EDilruba), Neelamjit Dhillon (Tabla and Bansuri), Mohammad Zareei (Computer), Colin Honigman (Computer), Jordan Hochenbaum (Chronome), Owen Vallis (Chronome), David Howe (Bass and Computer)

Dance: Raakhi Kapur, Monisha Manhas, Aarti Shah, Kiran Mander Sooch, Donna Simone Johnson, Rebecka Jackson

2. Reincarnation 1: The Winning of Friends

A town that had fallen into decay was now inhabited by mice. The mice lived in comfort and happiness, enjoying their lives. One day an elephant leader came with his herd to take a drink at the lake nearby. As they passed through mouse town, they inadvertently crushed all the mice that were in their way. The mice that survived decided to talk to the elephants. They pleaded that the elephants take a different route away from their town and in exchange offered their assistance in the future. The elephants agreed to this plea and took another route home.

Meanwhile, a king of a nearby kingdom wanted to trap some elephants and set a false watering hole to attract them. The elephant leader and his herd were captured, bound and dragged to the forest that was nearby to mouse town. They were tied to the sturdy trees with thick ropes. The elephant leader in despair remembered the mice as the only animals that could help them get out of the ropes they were bound with and called for their assistance. Remembering the promise of consideration, the mice came in thousands to gnaw away the binding ropes and all the elephants were set free.

Never underestimate people by their appearance.

Music: "KecatiK"

Inspired by: Pak Nyoman Wenten

Composers: Mohammad Zareei and Ajay Kapur

Performers: Mohammad Zareei, Ajay Kapur, Curtis Bhan, Neelamjit Dhillon, Colin Honigman, Jordan Hochenbaum, Owen Vallis, David Howe, Jeff Bryant

3. Reincarnation 2: The Monkey Bridge

The Monkey King once ruled over all the monkeys in the Himalayan mountains. Near a mountain next to the Ganges River stood a magnificent tree that bore luscious mangos. The monkeys ate the fruit under the shade of the tree. The Monkey King saw that the tree hung over the water, and if a mango were to fall, it would be carried into the city. Men from the town would then search for the sacred tree, seeking fruit, in turn endangering them all. He advised his monkeys to never allow a mango to fall into the river. The monkeys obeyed and for a long time not one mango fell into the river. One day, unnoticed, a ripe mango fell into the water and drifted to the city of Benares. The King of Benares was bathing in the water and he found the mango.

Intoxicated by its beauty and sweetness, he commanded his men to seek out more. As they searched the Himalayas, the men found the tree and the many monkeys living in it. They planned to kill the monkeys so they could harvest the mangos. The Monkey King, overhearing this, vowed to save his tribe and jumped across the river. There he gathered a long reed and bound it to a tree to allow the monkeys to escape the soldiers. But alas, the reed was too short and the only way to save the tribe was to allow them to jump across his back. The monkeys jumped to safety one by one. As the last monkey ran across, he carelessly jumped too hard and broke the Monkey King's back, leaving him to suffer. As the monkey king died, the King of Benares learned a valuable lesson...

Rule through love because your subjects are your children.

Music: "Sitka Chant → Moksha"

Composers: Ajay Kapur, Meason Wiley and Carl Burgin

Performers: Ajay Kapur (ESitar), Curtis Bhan (ESitar & EDilruba), Neelamjit Dhillon (Tabla and Bansuri), Mohammad Zareei (Computer), Colin Honigman (Computer), Jordan Hochenbaum (Chronome), Owen Vallis (Chronome), David Howe (Bass and Computer)

Dance: Raakhi Kapur, Monisha Manhas, Aarti Shah, Kiran Mander Sooch, Donna Simone Johnson, Rebecka Jackson

4. Reincarnation 3: A Foolish Friend

A king took a monkey for a pet. He kept him constantly close at hand for his amusement, for as it is said, parrots, partridges, doves, rams, monkeys, and such creatures are a king's natural companions. The monkey grew large and was given respect by all who surrounded the king. The king, because of his love and exceeding trust of the monkey, gave him a sword to carry. Early in the springtime the king noticed how beautiful the forest was that surrounded the kingdom. Its blossoms exuded a magnificent fragrance, while swarms of bees sang praise to the god of love. Thus overcome by love, he entered the grove with his favorite wife. After having pleasantly strolled through the forest, the king grew tired and said to his monkey, "I want to sleep a little while in this arbor of flowers. Take care that nothing disturbs me!" Having said this, the king fell asleep.

Presently a bee, pursuing the aroma of the flowers, flew up and landed on the king's head. Seeing this, the monkey thought angrily, "What is this? Am I to allow this common creature to bite the king before my very eyes?" With that he proceeded to drive it away. However, in spite of the monkey's defense, the bee approached the king again and again. Finally, blinded by anger, the monkey drew his sword and struck down the bee with a single blow. However, the same blow also split the king's head. The queen, sleeping next to the king, jumped up in terror. Seeing the crime, she said, "Oh, oh, you foolish monkey! What have you done to the king who placed such trust in you?" The monkey explained how it had happened, but thereafter he was shunned and scorned by everyone.

Do not choose a fool for a friend, for the king was killed by a monkey.

Music:

Performer/Composers: Trimpin and Jeff Bryant

Storytelling: Agam Darshi

5. Reincarnation 4: The Quarrelsome Quails

Each day a man comes and casts a net over the quails that fall to the forest floor. Hundreds of the birds are taken to the market to be sold. One day the king of the quails explained that they could escape the net by flying together in synchronicity to a thorny hill, the net would be lifted by the thorns and the birds could escape. But, it was important that they must not fight amongst themselves or they would be unable to fly under the net and would eventually get caught. The following day the men came and cast the net upon the quails. This time the quails listened to their king and flew together to the thorny hill and safely escaped, and so they continued this pattern to keep themselves safe. One day two birds began to quarrel, arguing about the direction of flight towards the thorny hill. This argument tangled the flock within the net and alas the hunter caught them.

Work together so all can succeed.

Music: "Tarana"

Composers: Ajay Kapur, Jordan Hochenbaum and Carl Burgin

Performers: Ajay Kapur (ESitar), Curtis Bhan (ESitar), Neelamjit Dhillon (Tabla and Bansuri), Mohammad Zareei (Computer), Colin Honigman (Computer), Jordan Hochenbaum (Chronome), Owen Vallis (Chronome), David Howe (Bass and Computer)
Dancers: Monisha Manhas, Aarti Shah, Raakhi Kapur, Rebecka Jackson, Donna Simone Johnson

6. Reincarnation 5: The Calm Lion and the Flight of the Beasts

A hare rested beneath a tree. A thought struck him, "If this earth should be destroyed, what would become of me?" At this very moment a ripe fruit fell and at the sound of it, the hare thought, "This solid earth is collapsing!" and he fled. When all the animals in the forest heard this news, they fled as well. When the lion saw this headlong flight of the animals, he thought, "The earth is nowhere coming to an end. Surely it must be a misunderstanding. If I don't make a great effort, they will all perish. I will save their lives!" The lion went to the animals and asked why there were running away. "The earth is collapsing," they answered. "Who saw it collapsing?" he asked. "That hare knows." So the lion asked the hare, "Is it true, sir, that the earth is breaking up?" "Yes, sir, I saw it," said the hare.

The hare shared the story of his premonition of the earth coming to an end and the horrible thud he heard. So the lion reassured the herd of animals, and said, "I will take the hare and go and find out exactly whether the earth is coming to an end or not." Then placing the hare on his back, he sprang forward with the speed of a lion. Arriving at the forest, he said "Come, show me the place you meant." "I dare not, my lord," said the hare. "Come, don't be afraid," said the lion.

The hare, not venturing to go near the tree, stood afar off and cried, "Yonder, sir, is the place of dreadful sound," and so saying, he repeated the first stanza: "From the

spot where I did dwell/Issued forth a fearful `thud`; What it was I could not tell,/Nor what caused it understood". After hearing what the hare said, the lion went to the foot of the tree, and saw the spot where the hare had been lying beneath the shade of the tree, and the ripe fruit that fell. The lion went back to the herd of animals and told them the story. The animals realized they had been foolish to believe idle gossip and so filled with fear.

Through calm inspection, insights reveal perfect wisdom.

Composer: Curtis Bahn

Choreographer/Performer: Tomie Hahn

Storytelling: Agam Darshi

7. The End and the Beginning

Music: "Samsara Reprise"

Composer/Performers: Ajay Kapur (ESitar), Curtis Bahn (ESitar and EDilruba), Neelamjit Dhillon (Tabla and Bansuri), Mohammad Zareei (Computer), Colin Honigman (Computer), Jordan Hochenbaum (Chronome), Owen Vallis (Chronome), David Howe (Bass and Computer), Jeff Bryant and Trimpin (Robotic Bees)

Dance: Raakhi Kapur, Monisha Manhas, Kiran Mander Sooch, Aarti Shah, Rebecka Jackson, Donna Simone Johnson, Tomie Hahn

THE CAST

DIRECTORS

Ajay Kapur, Director of Music Technology (MTIID) @ CalArts; KarmetiK Machine Orchestra (Director and Co-Producer); KarmetiK (Founder and Executive Director). Ajay Kapur received an Interdisciplinary Ph.D. in 2007 from University of Victoria combining computer science, electrical engineering, mechanical engineering, music and psychology with a focus on intelligent music systems and media technology. Ajay graduated with a Bachelor of Science in Engineering and Computer Science from Princeton University in 2002. Ajay's work revolves around one question: "How do you make a computer improvise with a human?" Using the rules set forth by Indian classical tradition, Ajay has been driven to build new interfaces for musical expression through extending the classical tabla, dholak and sitar with added microchips and sensor systems, while also designing and building programmable robotic musical instruments. The KarmetiK Machine Orchestra combines the last 12 years of work in custom technology for entertainment, only realized by the dedication of this strong team of interdisciplinary artists working together at CalArts.

Michael Darling, Head of Technical Direction in the Theatre School @ CalArts; KarmetiK Machine Orchestra (Production Director).

Michael Darling is a sculptor, tinkerer, theater technician and designer who works in any and all mediums both tangible and digital and is currently the head of technical design and direction at the California Institute of the Arts School of Theater (2003-present) and the Co-Director of the KarmetiK Machine Orchestra (2009-present).

Michael has worked for and with such artists and theater companies as Richard Foreman (*Now that Communism is Dead My Life Feels Empty*, *Maria Del Bosco*, *Panic*, *What to Wear*) and The Foundry Theater (*Lipstick Traces*, *And God Created Great Whales*, *Talk*, *Major Bang*) in New York, Los Angeles and all over the world.

GUEST ARTISTS

Trimpin is a Seattle, Washington-based kinetic sculptor, sound artist, musician, and composer, most of whose pieces integrate both sculpture and music in some way, and many of which make use of computers to play these instruments. Trimpin was born in southwestern Germany, near the Black Forest. His early musical training began at the age of eight, learning woodwinds and brass instruments. In later years he developed an allergic reaction to metal which prevented him from pursuing a career in music, so he turned to electro-mechanical engineering. Afterwards, he spent several years living and studying in Berlin where he received his Master's Degree from the University of Berlin. Eventually he became interested in acoustical sets while working in theater productions with Samuel Beckett and Rick Cluchey, director of the San Quentin Drama Workshop. From 1985–87 he co-chaired the Electronic Music Department of the Sweelinck Conservatory in Amsterdam.

Trimpin now resides in Seattle where numerous instruments that defy description adorn his amazing studio. In describing his work, Trimpin sums it up as a "extending the traditional boundaries of instruments and the sounds they're capable of producing by mechanically operating them. Although they're computer-driven, they're still real instruments making real sounds, but with another dimension added, that of spatial distribution. What I'm trying to do is go beyond human physical limitations to play instruments in such a way that no matter how complex the composition of the timing, it can be pushed over the limits." Trimpin is a frequent guest artist-in-residence at CalArts.

Curtis Bahn is an improvising composer involved in relationships of body, gesture, technology and sound. He holds a Ph.D. in music composition from Princeton University, and studies Hindustani classical music as a formal disciple of acclaimed sitarist, Ustad Shahid Parvez Khan. Curtis teaches interactive media at Rensselaer Polytechnic Institute in Troy, New York, and performs internationally. This year he was given a fellowship by the Asian Cultural Council to study and collaborate with artists in India.

Tomie Hahn is an artist and ethnographer. She performs *shakuhachi* (Japanese flute), *nihon buyo* (Japanese traditional dance), and experimental improvisations. She teaches at Rensselaer in Troy, N.Y. Her book, *Sensational Knowledge: Embodying Culture through Japanese Dance* (Wesleyan University Press) was awarded the Alan P. Merriam Prize from the Society for Ethnomusicology. She is currently working on *Peep Show*, a graphic ethnography on the fieldwork and the senses. <http://www.arts.rpi.edu/tomie>

MUSICIANS

Jordan Hochenbaum. Faculty, Herb Alpert School of Music CalArts; Ph.D. Candidate at New Zealand School of Music at Victoria University of Wellington; KarmetiK Machine Orchestra 2010–2012 (Performer/Composer); FlipMu Labs (co-founder).

Owen Vallis. Faculty, Herb Alpert School of Music CalArts; Ph.D. Candidate New Zealand School of Music at Victoria University of Wellington; Machine Orchestra 2010–2012 (Performer/Composer); FlipMu Labs (co-founder).

David Howe. (a.k.a. Merbet Moover), BFA 4 in Music Technology at CalArts; CalArts Halloween Party 2010–2011 (Musician), CalArts Electronic Music Festival (Producer); MTIID Tron 2011 (Musician); Co-producer of Interface LA and The Monomeets.

Colin Honigman. BFA 4 in Music Technology at CalArts, *Samsara* (Performer/Composer); Honeyman's Awesome Recital Good Job! (Composer/Performer); plays saxophone, steel drum, and piano.

Mohammad Zareei. BFA 4 in Music Technology at CalArts; B.Sc. Physics; *Samsara* (Performer/Composer); The Machine Orchestra at CalArts Modular Theater (Performer/Composer); The Machine Orchestra at PULSE Festival 2011, Savannah Georgia (Performer/Composer).

Jeff Aaron Bryant. MFA 1 in Music Technology at CalArts; B.A. in Philosophy, University of New Mexico; B.M. in Composition at Cornish College of the Arts. The Seattle Percussion Collective, Gamelan Pacifica, Seattle Philharmonic, Corigliano Quartet, and the Pacific Rims Percussion Quartet have performed his pieces. Bryant works as a studio assistant for Trimpin. He is a member of Gamelan Pacifica, and sings and writes songs with the Seattle band, Pollens.

Neelamjit Dhillon. MFA 2 in North Indian Music at CalArts. B Mus Jazz Studies (Saxophone Performance) Capilano University, B Ed (Secondary Music education) UBC; *Samsara* (Performer).

Meason Wiley. BFA '09 in Music Technology at CalArts, Ring Festival LA: Considering Wagner (Performer/Composer) REDCAT 2010; Machine Orchestra (Performer/Composer) REDCAT 2009; *Ah!* Interactive Opera (Audio Software/Hardware Designer) REDCAT 2009; *Samsara* (Composer).

Charlie Burgin. (a.k.a. Sahy Uhns) BFA 2010 in Music Technology at CalArts, *Samsara* (Composer); Co-founder Proximal Records.

DANCERS

Donna Simone Johnson. CalArts MFA 1–Acting (Dancer); *Samsara* (Dancer); *High School Musical 2* National Tour (Dancer); *High School Musical 3* (Dancer), *The Lion King* (Young Nala); Regional: *Twilight*: Los Angeles, 1992 (Solo Work), *Life Without Parole*

(Helen Broker), *Dog Sees God* (Tricia York), *Massacre*, *Sing To Your Children* (Vivy), *The Cherry Orchard* (*Dunyasha*). Commercials: Burger King, Adidas, Gap, Target. Film: *High School Musical 3*, *You Got Served*, *Take It To The Streets*.

Aarti Shah. Principal Dancer, South Asian Arts; *Samsara* (Dancer), *Bollywood Birthday Party* (Dancer), *Bollywood Wedding* (Dancer), Vancouver 2010 Winter Olympics: Victory Day Ceremonies (Choreographer/Performer), Opening and Closing Ceremonies (Performer), Vancouver International Film Festival Closing Ceremony (Choreographer/Dancer).

Rebecka Jackson. MFA 1 Stage Manager. She received a B.A. at University of Missouri St. Louis in Theater and Dance. Credits include *The Trestle at Pope Lick Creek* (CalArts, Choreographer), *Frederick Douglass Now* (Stage Manager), *Booth! The Musical* (NYC Skirball Theater Stage Manager), *The Sum of Motion* (UMSL, Choreographer and Principal Dancer), and *Sizwe Banzi is Dead* (Bermuda National Theater, Stage Manager).

Kiran Mander Sooch. Principal Dancer, South Asian Arts. *Bollywood Birthday Party* (Performer), *Bollywood Wedding* (Performer), Vancouver 2010 Winter Olympics: Victory Day Ceremonies (Choreographer/Performer), 2009 Juno Awards (Opening Performer), FolkFit (Founder), UBC Girlz Bhangra team (Choreographer/Founder), Vancouver International Bhangra Society (Board Director).

Monisha Manhas. Principal Dancer, South Asian Arts. Nirtya Manjaree School of Kathak (Graduate), Vancouver 2010 Winter Olympics, Victory Day Ceremonies (Choreographer/Performer), *From Kathak To Bollywood* (Performer), United Nation Global Urban Dance Forum (Performer), Western Canada Raas-Garba Competition: (Choreographer/Performer), Camp Dosti (Choreographer).

DESIGNERS

Jason Jahnke. 2011 BFA Experimental Animation *Samsara* (Animation Director) Animation to The Masses work, promos for Dublab, animation for music video for Jon Wayne. Jason's primary interests are design, animation, and technology. He will begin his MFA in music tech this fall.

Nathan Files. BFA 2 Lighting Designer (Assistant Lighting Designer); CalArts Spring Event 2012 (Producer); *A Splendid Death* (Master Electrician), *Firebugs* (Master Electrician), CalArts Halloween 2011 (Master Electrician/Producer); Machine Orchestra 2011 (Lighting Designer); Audiophile Tour 09-10 (Lighting Design/Artist).

Grant Dunn. Lighting Designer, BFA 3. CalArts: *On The Frontier* (Video Design); *The Lazarus Exhibition* (Lighting Design); *In The Jungle of Cities* (Asst. Lighting Design); *Flixus* (Lighting Design).

Paul DiPietro. Faculty in Technical Direction at CalArts. Other current projects: Radiohole's *WHA!?! Whatever Heaven Allows*, Danish Tour, April 2012. Previously:

Technical Director at 3LD Art and Technology Center. Other recent work: Chuck Mee's *Fire Island*, 2008 (nominated for Henry Hewes Design Award). Kevin Cunningham's *Losing Something*, 2007 (won Henry Hewes Design Award).

Dimitri Diakopoulos. MFA 1, Music Technology. As software engineer for the Machine Orchestra, Dimitri developed Signal and HIDUINO, software packages for networked artist-robot interaction. Machine Orchestra 2010, 2011, 2012.

Trisha Rampersad. Costume Designer/Wardrobe. BHANA Design Company (Creative Director and Clothing Designer); FW 2011/12 (Principal Fashion Designer), FW 2010/11 (Principal Fashion Designer); SS 2010 (Principal Fashion Designer), FW 09/10 (Principal Fashion Designer); FW 08/09 (Principal Fashion Designer).

Agam Darshi. Actor/Filmmaker. *Samsara* (Spoken Word and Shadow Artist) County, NBC (Talaikha); *Sanctuary*, Syfy (Kate Freelander); *Dan For Mayor*, CTV (Breanna); *2012* (Aparna); Vancouver International South Asian Film Festival (Co-Founder/Director) *Bollywood Beckons* (Writer, Producer, Actor); *Future Language of Slaves* (Writer, Producer).

Dan Norman. Video Programmer. BFA 1, Lighting Designer. Originally from the Bay Area. This is his first show and he is loving every minute of it.

MANAGERS

Raakhi Sinha. MFA 1, Production Management (Production Manager/Choreographer/Dancer); South Asian Arts (Artistic Director); *Bollywood Birthday Party* (Producer/Writer); *Bollywood Wedding* (Producer/Writer); *Bollywood Olympics* (Co-Presenter/Choreographer), *Aisha n Ben* (Co-Producer), *The Misfit* (Producer), *Fish Eyes* (Producer), Vancouver 2010 Winter Olympics: Victory Day Ceremonies (Choreographer/Performer), Opening and Closing Ceremonies (Performer)

Megan Barrett. MFA 1, Stage Management (Stage Manager) CalArts: *Taco Time* (Stage Manager), *The Portrait of a Lady* (Stage Manager), *Prairie Fire* (Asst. Stage Manager), Jenny Wiley Theatre: *Annie* (Production Stage Manager), *Joseph and the Amazing Technicolor Dreamcoat* (Production Stage Manager), *Cinderella* (Production Stage Manager), *The Frog Prince* (Asst. Stage Manager), Lamar University.

Production Crew:

John Baffa (Audio Production Director)
Peter Gonzales
Charlie Cohen

Film Crew

Benny Schuetze
Leila Navon

Interactive Installation

Eric Singleton

Producer:

Lauren Pratt

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Special Thanks

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DID YOU LIKE THE SHOW?

We need your help!



We need Post-Production Funding to create a DVD of this Production.

Please help support our project. The Smallest Donation (\$5, \$10, \$15, \$25, \$100) can make a huge difference.

Donate at karmetik.com/kickstarter

