

**Coverage based on the Press Release - IIT Madras & Rice University Researchers
develop Algorithms for Lensless, Miniature Cameras**

Print Coverage

Date: 14th May 2021

Media: Deccan Chronicle (clip attached)

Edition: Chennai

Page No: 3

Journalist: NA

Professor: Dr. Kaushik Mitra

Headline: IIT-M, rice varsity researchers develop algorithms for lensless cameras

IIT-M, rice varsity researchers develop algorithms for lensless cameras

DC CORRESPONDENT
CHENNAI, MAY 13

The Indian Institute of Technology-Madras (IIT-M) and Rice University in the US have developed algorithms for lensless, miniature cameras, which have numerous vision applications in augmented reality and virtual reality.

The research was led by Dr Kaushik Mitra, assistant professor, department

of electrical engineering, IIT-M, and Prof Ashok Veeraghavan, Rice University.

Dr Mitra said the existing algorithms to deblur images based on traditional optimisation schemes yield low-resolution 'noisy images.' 'Our research team developed a reconstruction algorithm called 'FlatNet' for lensless cameras which resulted in significant improvement

over traditional optimisation-based algorithms. FlatNet was tested on various real and challenging scenarios and was found to be effective in de-blurring images captured by the lensless camera."

Lensless cameras do not have a lens which, in a conventional camera, acts as a focusing element allowing the sensor to capture a sharp photograph of the scene.

Due to the absence of this focusing element, the lensless camera captures a multiplexed or globally blurred measurement of the scene.

The findings were presented as a paper in the IEEE international conference on computer vision and an extended version appeared in IEEE transactions on pattern analysis and machine intelligence.

Online Coverage

Date: 13th May 2021

Media: NDTV-Education

Edition: Online

Journalist: Ms. Bhoomika Aggarwal

Professor: Dr. Kaushik Mitra

Headline: IIT Madras Develops Algorithm For Lensless, Miniature Cameras

URL: <https://www.ndtv.com/education/iit-madras-develops-algorithm-for-lensless-miniature-cameras>

Date: 13th May 2021

Media: DT Next

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Headline: IIT-M, Rice University researchers jointly develop algorithms for lensless cameras

URL: <https://www.dtnext.in/News/City/2021/05/13211258/1294020/IITM-Rice-University-researchers-jointly-develop-algorithms-.vpf>

Date: 13th May 2021

Media: The Times of India-Education

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Headline: IIT Madras and RICE University researchers develop algorithms for lensless miniature cameras

URL: <http://www.educationtimes.com/article/newsroom/82606683/iit-madras-and-rice-university-researchers-develop-algorithms-for-lensless-miniature-cameras>

Date: 13th May 2021

Media: Outlook

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT Madras and Rice University Researchers Develop Algorithms For Lensless, Miniature Cameras

URL: <https://www.outlookindia.com/website/story/india-news-iit-madras-and-rice-university-researchers-develop-algorithms-for-lensless-miniature-cameras/382684>

Date: 13th May 2021

Media: UNI

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT-M, Rice Univ of US develop algorithms for lensless, miniature cameras

URL: <http://www.uniindia.com/~iit-m-rice-univ-of-us-develop-algorithms-for-lensless-miniature-cameras/States/news/2394462.html>

Date: 13th May 2021
Media: BW Education
Edition: Online
Journalist: NA

Headline: IIT Madras & Rice University Researchers Develop Algorithms For Lensless, Miniature Cameras

URL: <http://bweducation.businessworld.in/article/IIT-Madras-Rice-University-Researchers-Develop-Algorithms-Lor-Lensless-Miniature-Cameras/13-05-2021-389591/>

Date: 13th May 2021
Media: The New Indian Express-EDEX
Edition: Online
Journalist: NA
Professor: Dr. Kaushik Mitra

Headline: IITM, Rice University develop deep learning algorithms for producing photo-realistic images from blurred lensless capture

URL: <https://www.edexlive.com/news/2021/may/13/iitm-rice-universityresearchers-develop-deep-learning-algorithms-for-lensless-cameras-20665.html>

Date: 13th May 2021
Media: Delhi Post
Edition: Online
Journalist: NA
Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: Researchers Develop Algorithm for Lensless, Miniature Cameras

URL: <https://delhipostnews.com/researchers-develop-algorithm-for-lensless-miniature-cameras/>

Date: 13th May 2021
Media: ABP Education
Edition: Online
Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT Madras & Rice University researchers develop new algorithm for lensless cameras

URL: https://www.abpeducation.com/news/iit-madras-rice-university-researchers-develop-new-algorithm-for-lensless-cameras/cid/1208822?utm_source=twitter&utm_medium=social&utm_campaign=abpedu_twit

Date: 14th May 2021
Media: News Today
Edition: Online
Journalist: NA
Professor: Dr. Kaushik Mitra

Headline: IIT-M, Rice University develop algorithms for cameras

URL: <https://newstodaynet.com/index.php/2021/05/14/iit-m-rice-university-develop-algorithms-for-cameras/>

Date: 13th May 2021

Media: Skill Outlook

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT Madras & Rice University Researchers develop Algorithms for Lensless, Miniature Cameras

URL: <https://skilloutlook.com/education/iit-madras-rice-university-researchers-develop-algorithms-for-lensless-miniature-cameras>

Date: 13th May 2021

Media: Edu Advice

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT M & RU Researchers develop Algorithms for Lensless, Miniature

URL: <http://eduardvice.in/home/NewsDetail?pid=40144>

Date: 13th May 2021

Media: India Education Diary

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT Madras & Rice University Researchers Develop Algorithms For Lensless, Miniature Cameras

URL: <https://indiaeducationdiary.in/iit-madras-rice-university-researchers-develop-algorithms-for-lensless-miniature-cameras/>

Date: 13th May 2021

Media: Techgig

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Headline: IIT Madras and Rice University jointly develop algorithms for lensless cameras

URL: <https://content.techgig.com/IIT-Madras-and-Rice-University-jointly-develop-algorithms-for-lensless-cameras/articleshow/82605119.cms>

Date: 13th May 2021

Media: Navjeevan Express

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT-M & Rice University Researchers develop Algorithms for Lensless, Miniature Cameras

URL: <https://navjeevanexpress.com/iit-m-rice-university-researchers-develop-algorithms-for-lensless-miniature-cameras/>

Date: 14th May 2021

Media: Shiksha

Edition: Online

Journalist: Ms. Anupama Mehra

Professor: Dr. Kaushik Mitra

Headline: IIT Madras researchers develop algorithm for lensless, miniature cameras

URL: <https://www.shiksha.com/articles/iit-madras-researchers-develop-algorithm-for-lensless-miniature-cameras-blogId-59463>

Date: 13th May 2021

Media: Devdiscourse

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Headline: IIT-M, Rice University researchers jointly develop algorithms for lensless cameras

URL: <https://www.devdiscourse.com/article/education/1571719-iit-m-rice-university-researchers-jointly-develop-algorithms-for-lensless-cameras>

Date: 13th May 2021

Media: Yahoo

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Headline: IIT-M, Rice University researchers jointly develop algorithms for lensless cameras

URL: <https://in.news.yahoo.com/iit-m-rice-university-researchers-120242779.html>

Date: 13th May 2021

Media: Divya Sandesh

Edition: Online

Journalist: NA

Headline: IIT Madras And Rice University Researchers Develop Algorithms For Lensless, Miniature Cameras

URL: <https://www.divyasandesh.in/382684-3/>

Date: 13th May 2021

Media: Hastakshep News

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: Researchers develop an algorithm for lensless, miniature cameras

URL: <https://www.hastakshepnews.com/researchers-develop-an-algorithm-for-lensless-miniature-cameras/>

Date: 13th May 2021

Media: Indian Sentinel

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: Researchers develop algorithm for lensless, miniature cameras

URL: <https://indiansentinel.in/researchers-develop-algorithm-for-lensless-miniature-cameras/>

Date: 13th May 2021

Media: Latestly

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Headline: IIT-M, Rice University Researchers Jointly Develop Algorithms for Lensless Cameras

URL: <https://www.latestly.com/agency-news/india-news-iit-m-rice-university-researchers-jointly-develop-algorithms-for-lensless-cameras-2478692.html>

Date: 13th May 2021

Media: The Federal

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: Researchers in India and US develop algorithm for lensless, miniature cameras

URL: <https://bit.ly/2Qi2TAx>

Date: 13th May 2021

Media: Hummingbird News

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT Madras & Rice University Researchers develop Algorithms for Lensless, Miniature Cameras

URL: <https://hummingbirdnews.in/iit-madras-rice-university-researchers-develop-algorithms-for-lensless-miniature-cameras/>

Date: 13th May 2021

Media: Nyoooz

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Headline: IIT M Rice University develop algorithms for cameras

URL: <https://www.nyoooz.com/news/chennai/1575670/iit-m-rice-university-develop-algorithms-for-cameras-news-today/>

Date: 13th May 2021

Media: Newsdig

Edition: Online

Journalist: NA

Headline: IIT Madras And Rice University Researchers Develop Algorithms For Lensless, Miniature Cameras

URL: <https://newsdig.in/news/885052972n/IIT-Madras-And-Rice-University-Researchers-Develop-Algorithms-For-Lensless-Miniature-Cameras>

Date: 13th May 2021

Media: HT Syndication

Edition: Online

Journalist: NA

Headline: IIT-M, Rice Univ of US develop algorithms for lensless, miniature cameras

URL: <https://www.htsyndication.com/united-news-of-india/article/iit-m%2C-rice-univ-of-us-develop-algorithms-for-lensless%2C-miniature-cameras/50978731>

Date: 13th May 2021

Media: Daily Hunt

Edition: Online

Journalist: NA

Professor: Dr. Kaushik Mitra

Student: Mr. Salman Siddique Khan, Mr. Varun Sundar and Mr. Adarsh VR

Headline: IIT Madras And Rice University Researchers Develop Algorithms For Lensless, Miniature Cameras

URL: <https://indus.dailyhunt.in/news/india/english/outlook-epaper-outlooke/iit+madras+and+rice+university+researchers+develop+algorithms+for+lensless+miniature+cameras-newsid-n279250588>

Date: 13th May 2021

Media: Flipboard

Edition: Online

Journalist: NA

Headline: IIT-M, Rice University researchers jointly develop algorithms for lensless cameras

URL: https://flipboard.com/topic/indiantechnology/iit-m-rice-university-researchers-jointly-develop-algorithms-for-lensless-camer/a-C7_DjPTTL-ZyZOJVQnqkQ%3Aa%3A2005961640-4df913135b%2Foutlookindia.com