

## CERTIFICATIONS & AWARDS:

- Introduction to Big Data, San Diego (<https://www.coursera.org/account/accomplishments/verify/7R6XLEAN72YS>)
- **Probability density function estimation for video in the DCT domain** publication date Jan 26, 2008 [publication descriptions spie.org](https://arxiv.org/abs/0801.2635)
- Hadoop Platform and Application Framework, San Diego <https://www.coursera.org/account/accomplishments/verify/X8LRFATGM4F6>
- GitHub: - <http://github.com/ashu2012>
- 2022 Blockchain Smart Contract Architect Certificate [cert](#)
- Piramal Inhouse estamping and E-sign capability built /used in production & awarded by Anand piramal  
Patent Pending
- Stackoverflow <https://stackoverflow.com/users/5869997/donald>
- Honeywell building solutions award
- Completed
- Secured all India rank 416 in IIT JEE 2004 where more than 5 lakh student sits for entrance. Got Computer Science seat in Indian institute of technology Kanpur.

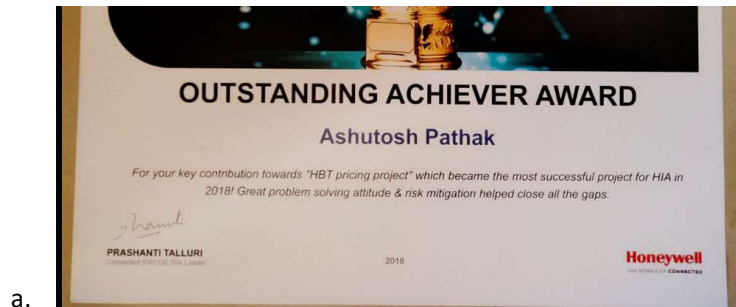
### 1. Introduction to Big Data, San Diego



### 2. Hadoop Platform and Application Framework,



### 3. Honeywell Outstanding Achiever award



#### 4. Probability density function estimation for video in the DCT domain publication

spie.org/Publications/Proceedings/Paper/10.1117/12.767469?SSO=1

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PROCEEDINGS PAPER  
**Probability density function estimation for video in the DCT domain**  
Author(s): Q. Dumitru, M. Mitrea, F. Philéus, A. Pathak

FORMAT	MEMBER PRICE	NON-MEMBER PRICE	
PDF	\$17.00	\$21.00	<b>ADD TO CART</b>

**Paper Abstract**

Regardless the final targeted application (compression, watermarking, texture analysis, indexation, ...), image/video modelling in the DCT domain is generally approached by tests of concordance with some well known pdfs (like Gaussian, generalised Gaussian, Laplace, Rayleigh ...). Instead of forcing the images/videos to stick to such theoretical models, our study aims at estimating the true pdf characterising their behaviour. In this respect, we considered three intensively used ways of applying DCT, namely on whole frames, on 4x4 blocks, and on 8x8 blocks. In each case, we first prove that a law modelling the corresponding coefficients exists. Then, we estimate this law by Gaussian mixtures and finally we identify the generality of such model with respect to the data on which it was computed and to the estimation method it relies on.

**Paper Details**

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#### 5. 2022 Blockchain Smart Contract Architect Certificate

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Supported by Ministry of Electronics and Information Technology (MeitY), Govt.

**Blockchain & Applications**  
one weeks (40 hours)

**Certificate of Completion**

This is to certify that **Ms. / Mrs. / Mr. / Dr. ASHUTOSH PATHAK** from **INDIAN INSTITUTE OF TECHNOLOGY, KANPUR** has participated in a January 3 - 8, 2022 online certificate course on **Blockchain & Applications** jointly organized by Electronics and ICT Academies at IIT Kanpur, IIT Roorkee, MNIT Jaipur, NIT Patna and PDPM IIITDM Jabalpur during **one weeks (40 hours)** under the **"Scheme of financial assistance for setting up of Electronics and ICT Academies"** of the **Ministry of Electronics and Information Technology (MeitY), Government of India**. She / He has successfully completed all the requirements of the programme with **Excellent** grade. The programme is recognized by AICTE/UGC.

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6. Secured all India rank 416 in IIT JEE 2004

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विद्या परिषद की अनुशंसा पर  
भारतीय प्रौद्योगिकी संस्थान कानपुर  
के संचालक मण्डल द्वारा  
आशुतोष पाठक  
को  
प्रौद्योगिकी स्नातक  
की उपाधि  
संगणक विज्ञान तथा अभियांत्रिकी  
में निर्धारित अर्हताएँ सफलतापूर्वक पूर्ण कर लेने पर  
तीन जुलाई दो हजार दस को  
प्रदान की गयी।



THE BOARD OF GOVERNORS  
OF THE  
INDIAN INSTITUTE OF TECHNOLOGY KANPUR  
UPON THE RECOMMENDATION OF THE SENATE  
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ASHUTOSH PATHAK  
THE DEGREE OF  
BACHELOR OF TECHNOLOGY  
IN  
COMPUTER SCIENCE & ENGINEERING  
ON HAVING SUCCESSFULLY COMPLETED THE  
PRESCRIBED REQUIREMENTS  
GIVEN AT KANPUR ON THIS THIRD DAY OF JULY  
TWO THOUSAND TEN

a.

7. Internship in France



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To whom it may be concerned with

It is my pleasure to recommend Ashutosh Pathak for being enrolled in a PhD program. Ashutosh has done his May-June 2007 Summer internship under my guidance and has proved himself as a highly motivate and capable thinker in research: browse state-of-the-art study, implement and integrate software modules, critical analyze the obtain solution and start again towards a better one is a cycle he is familiar with.

Despite his young age at that time, Ashutosh already expressed me his dream for a PhD perspective. This made him take very seriously all the tasks I assigned him: he studied basic and advanced statistical models, experienced himself in image/video processing and did not hesitate in incrementally improve his internship report. He was very proud to co-author a conference paper we published on that occasion in Proc. SPIE series. He was thus demonstrating his possibility to work individually and then to integrate his results with the ones obtained by the others members of the teams.

I've also noticed his natural curiosity and desire for discovery new cultures: during his stay in France, he established friendly contacts not only with French but also with other European students visiting our campus at that time.

Consequently, I recommend him without any reservation: I fully expect him to be as excellent in his PhD course as he was during the internship.

Sincerely,



Mihai Mitrea

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