Copy

PURDUE
THE GRADUATE SCHOOL

Personal Background

Biographical	
First Name	Mohit Harishchandra
Last Name	Deshmukh
Preferred Name	Mohit
Sex	Male
Birthdate	07/02/1995
Native Language	Marathi
Contact	
Email	mohit.bits.md@gmail.com
Phone	+91 81858 61591
Mobile	+91 81858 61591
Mailing Address	Sarpanch Nagar,Malegaon Road ,Taroda(Kh) Nanded, Maharashtra 431605 India
Citizenship	
Citizenship Status	Foreign National
Primary Citizenship	India
Additional Information	
I am willing to receive important text messages from the Graduate School	Yes
Citizenship Status	International
What is your native language?	Marathi

Copy

PURDUE
THE GRADUATE SCHOOL

Emergency Contact

Form Title	Emergency Contact
Relationship	Parent/Guardian
First Name	Harishchandra
Last Name	Deshmukh
Email Address	mohit.bits.md@gmail.com
Street/P.O. Box/Apartment	Sarpanch Nagar
Street Line 2	Malegaon Road
Street Line 3	Taroda Khurd
City	Nanded
Country	India
Zip/Postal Code	431605
International Telephone	+919850576704

Copy

PURDUE
THE GRADUATE SCHOOL

Residency

Form Title	Residency
Geography	
Country of Birth*	India
City of Birth*	Nanded
Number of years you have lived in the United States*	00
Number of years you have lived outside the United States*	22

Copy

PURDUE
THE GRADUATE SCHOOL

Campus and Program

Form Title	Campus and Program
Purdue University Status	
Are you currently a registered graduate student at one of the Purdue University campuses?	No
Select your current status as it pertains to Purdue University	New to Purdue
Are you currently a Purdue employee (including a graduate staff member) on any Purdue campus? If yes, indicate your PUID in the field above.	No
I consent and authorize Purdue University faculty and/or staff to access my Purdue University academic record for University business (Applicants must still submit official Purdue transcripts).	No
Campus and Program	
Select a Campus	West Lafayette (Main Campus)
Select your Proposed graduate Major	Mechanical Engineering

Copy

PURDUE
THE GRADUATE SCHOOL

Program Details

Form Title	Program Details
Based upon the Campus and Program you have selected, please complete the following. To change your Campus or Program, please return to the Campus and Program page.	
Your Selected Campus	West Lafayette (Main Campus)
Your Selected Graduate Major	Mechanical Engineering
Please select an Area of Interest. Available for selected Programs only. Not all Areas of Interest are available for both Master's and Ph.D. degrees.	Heating/Ventilating/Air Conditioning and Refrigeration
Please select a Degree Objective (Based on your Program selection)	MS in Mechanical Engineering (MSME)
Please select your primary Course Delivery method	On-Campus
	Fall 2018

Copy

PURDUE
THE GRADUATE SCHOOL

Mechanical Engineering Questionnaire

Form Title	Mechanical Engineering Questionnaire
What is your ultimate degree goal (MS or PhD)?*	Ph.D. in Mechanical Engineering
What is your career goal (e.g. industry, academia, other)?*	Academic Career (such as a Professor)
For MS applicants, which option do you want to choose?	Thesis
For MS applicants, if the School of Mechanical Engineering finds you qualified, do you want to be considered for admission into the Direct PhD program?	Yes
First Choice	Heating/Ventilating/Air Conditioning and Refrigeration
Second Choice	Heat Transfer
Third Choice	Fluid Mechanics & Propulsion
	James E. Braun
	Suresh Garimella
	Guang Lin
	Steven F. Son
How do you expect to finance your graduate education?*	Combine Teaching/Research Assistantship
Will you be taking your courses as a Distance Learning student and not be attending courses at the West Lafayette Campus?*	No
Specify any special skills or professional attainments (which you discuss in your statement of purpose) which qualify you for a teaching assistantship or a research assistantship.	In my seventh semester during the undergraduate program I was a teaching assistant for the course Fluid Mechanics.In this course I mainly assisted the instructor in the evaluation of assignments and unit tests. I also regularly submitted question banks for the scheduled evaluation components.
Give examples of research in which you have participated:	I have participated in several major research tasks during the course of my undergraduate program. I began with an informal study oriented project in condition monitoring of wind turbines. Here I learned the basics of neural networks. This was helpful for me during both my projects in the last year internship. In the first one I used neural networks to predict the energy consumption by a vertical rolling mill. The second one involved monitoring

Copy

PURDUE
THE GRADUATE SCHOOL

Mechanical Engineering Questionnaire

of the performance indices of controllers used in manufacturing plants of fibres.
In a project, I used analytical hierarchy process from multi criteria decision making to obtain the greenness index of buildings. I successfully developed a program to rate the buildings.
I have worked on a project based on literature review of research on shape memory alloys and their applications in the field of robotics. I completed a summer internship in a ship construction organisation Goa Shipyard Ltd. Here I studied the attachment issues of composite mast to steel hull as a group project. To solve these issues, we came up with the types of joins required, based on the study.
I completed a project that involved determination of optimum residence time of slabs in a reheat furnace. The novel method we worked on reduced the time required for computation.
In an industry based project I obtained an empirical relationship between RPM and power produced by the screw turbines. This could be applied in designing of the turbines.
As part of a course mini project I worked in a group to develop a smart solar tracker. My part was to model the parts in creo and to fabricate them. I also learnt the skills required to work as a team. We could successfully demonstrate the movement of tracker based on the light from a torch.
As a group assignment in the course IC Engines we worked to study the advancements in the field of hybrid electric vehicles. I presented the summary of the work on behalf of the group.

List the name and address of your high school*

Pratibha Niketan Mahavidyalay
Banda Ghat Road, Vazirabad, Nanded, Maharashtra,India
431604

Copy

PURDUE
THE GRADUATE SCHOOL

Education Background

Undergraduate #1	
Institution	Birla Inst Tech & Sci-India (IN0225)
Dates of Attendance	08/2013 - 06/2017
Location	Hyderabad, Telangana, India
Degree	Bachelor of Engineering: 08/2017
Major	Mechanical Engineering
GPA	8.91 / 10
Class Rank	10 / 84
Language	English

Copy

PURDUE
THE GRADUATE SCHOOL

Additional Information

Form Title	Additional Information
First Name	James
Last Name	Braun
First Name	Guang
Last Name	Lin
First Name	Suresh
Last Name	Garimella
First Name	Amy
Last Name	Marconnet
First Name	Steven
Last Name	Son
Are you seeking a Purdue University graduate assistantship or fellowship?	Research Assistantship Fellowship Teaching Assistantship
How did you originally hear about Purdue? *	Professor or Advisor Friend/Family Member

Certifications

Do you hold a teaching or other certification?	No

Publications

List publications	Mohit Deshmukh, Daseswara Rao Yendluri, K. Ram chandra murthy, R. Parameshwaran 'Performance investigation on sustainable screw turbine using computational fluid dynamics for micro and pico-hydro applications' 2017 https://www.researchgate.net/publication/317329516_Performance_investigation_on_sustainable_screw_turbine_using_computational_fluid_dynamics_for_micro_and_pico-hydro_applications

Copy

PURDUE
THE GRADUATE SCHOOL

Employment

Job #1	
Organization Name	Capgemini
Dates of Employment	08/2017 - Present
Ending Position	Senior Analyst
Description	This is an IT services company.My work involves applications development and maintenance. The programming languages I use are java and python.
Location	Pune, Maharashtra, India
Direct/Indirect Reports	1
Hours	45
Employment Type	Full-time
Pre/Post Baccalaureate	Post-Baccalaureate
Job #2	
Organization Name	Aditya Birla Group Management Corporation
Dates of Employment	01/2017 - 06/2017
Ending Position	Intern
Description	This company is the corporate unit for manufacturing plants of the conglomerate.I completed research based projects. In the first one I was given the hourly basis data of the operating parameters and the energy consumption of a vertical rolling mill. Using neural networks and global optimisation we were able to predict the optimum parameters.In the second project we analysed controller data to detect the oscillations and irregularities.I developed a program to detect the faults in control loops.
Location	Mumbai, Maharashtra, India
Direct/Indirect Reports	1
Hours	45
Employment Type	Internship
Pre/Post Baccalaureate	Pre-Baccalaureate

Copy

PURDUE
THE GRADUATE SCHOOL

Test Scores

GRE	
GRE	Verified Score Date: 10/02/2017 Verbal: 150 (48%) Quantitative: 168 (94%) Analytical Writing: 3.5 (42%)
TOEFL	
TOEFL-Internet-based Test (iBT)	Verified Score Date: 10/15/2017 Total Score: 101 Listening: 28 Reading: 29 Writing: 22 Speaking: 22

Copy

PURDUE
THE GRADUATE SCHOOL

Recommendations

Reference #1	
Name	Dr. Sandip Deshmukh
Organization	Birla Institute of Technology and Science, Pilani
Title	Associate Professor
Relationship	Professor,Mentor
Phone	+91 40 6630 3620
Email	ssd@hyderabad.bits-pilani.ac.in
Waiver	Do you wish to waive your right to examine this letter of recommendation?
Waiver Response	I waive my right to access this report.
Waiver Signature	Mohit Harishchandra Deshmukh
Recommendation Requested	12/11/2017
Recommendation Submitted	12/11/2017
Reference #2	
Name	Dr. Satish Kumar Dubey
Organization	Birla Institute of Technology & Science, Pilani
Title	Assistant Professor
Relationship	Course Instructor,Project Supervisor,Mentor
Phone	+91 40 6630 3673
Email	satishdubey@hyderabad.bits-pilani.ac.in
Waiver	Do you wish to waive your right to examine this letter of recommendation?
Waiver Response	I waive my right to access this report.
Waiver Signature	Mohit Harishchandra Deshmukh
Recommendation Requested	12/09/2017
Recommendation Submitted	12/16/2017
Reference #3	
Name	Dr. Venkata Daseswara Rao Yendluri
Organization	Birla Institute of Technology and Science,Pilani
Title	Associate Professor
Relationship	Project Supervisor,Instructor, Head of the Department
Phone	+91 40 6630 3551
Email	yvdrao@hyderabad.bits-pilani.ac.in

Copy

PURDUE
THE GRADUATE SCHOOL

Recommendations (continued)

Waiver	Do you wish to waive your right to examine this letter of recommendation?
Waiver Response	I waive my right to access this report.
Waiver Signature	Mohit Harishchandra Deshmukh
Recommendation Requested	12/11/2017
Recommendation Submitted	12/11/2017

Copy

PURDUE
THE GRADUATE SCHOOL

Acknowledgements

Form Title	Acknowledgements
Have you ever been found responsible for a disciplinary violation at any educational institution you have attended from the 9th grade (or the international equivalent) forward, whether related to academic misconduct or behavioral misconduct, that resulted	No
Have you ever been adjudicated guilty or convicted of a misdemeanor, felony, or other crime? Note that you are not required to answer "yes" to this question, or provide an explanation, if the criminal adjudication or conviction has been expunged, sealed, a	No

Release Statement for Donor Notification

If I am selected for a fellowship, scholarship, travel grant, award, or prize, I authorize Purdue University to release my name, major and hometown to the donor(s) and confirm that all criteria for selection were met. In addition, I agree to send a letter	Yes

Publicity Release Statement

If I am selected for a fellowship, scholarship, travel grant, award, or prize, I authorize Purdue University to release personally identifiable information from my education record to official Purdue organizations as well as outside entities for scholarshi	Yes

Text Messaging

Copy

PURDUE
THE GRADUATE SCHOOL

Acknowledgements (continued)

I am willing to receive important text messages from the Purdue Graduate School	Yes

Confirmation

I have read and understood and acknowledge the above statements.*

Copy

PURDUE
THE GRADUATE SCHOOL

Signature

Certification	
Signature	Mohit Harishchandra Deshmukh
Date	12/12/2017

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI (RAJASTHAN) INDIA
TRANSCRIPT

ID NO 2013A4PS465H

NAME DESHMUKH MOHIT HARISHCHANDRA

Degree(s) Completed:
B.E.(Hons.)(Mechanical)(with Practice School)

CGPA : 8.91 Division : FIRST

	COURSE NO		COURSE TITLE	UNITS	GRADE	
FIRST SEMESTER 2013-2014	BITS	F111	THERMODYNAMICS	3	C	
	BITS	F112	TECHNICAL REPORT WRITING	2	B	
	CHEM	F110	CHEMISTRY LABORATORY	1	A	
	CHEM	F111	GENERAL CHEMISTRY	3	B	
	MATH	F111	MATHEMATICS I	3	B	
	ME	F110	WORKSHOP PRACTICE	2	B	
	PHY	F111	MECH OSCILLATIONS & WAVE	3	A-	
					CGPA...7.94	
SECOND SEMESTER 2013-2014	BIO	F110	BIOLOGY LABORATORY	1	A-	
	BIO	F111	GENERAL BIOLOGY	3	B	
	BITS	F110	ENGINEERING GRAPHICS	2	B-	
	CS	F111	COMPUTER PROGRAMMING	4	C	
	EEE	F111	ELECTRICAL SCIENCES	3	A-	
	MATH	F112	MATHEMATICS II	3	A-	
	MATH	F113	PROBABILITY & STATISTICS	3	A	
	PHY	F110	PHYSICS LABORATORY	1	B	
					CGPA...8.05	
FIRST SEMESTER 2014-2015	GS	F322	CRITI ANAL OF LIT & CINE	3	B	HEL
	MATH	F211	MATHEMATICS III	3	B	
	ME	F211	MECHANICS OF SOLIDS	3	B	
	ME	F212	FLUID MECHANICS	3	A	
	ME	F213	MATERIALS SCIENCE & ENGG	2	A	
	ME	F214	APPLIED THERMODYNAMICS	3	A	
	ME	F215	MECHANICAL ENGG LAB	2	A-	
					CGPA...8.36	
SECOND SEMESTER 2014-2015	HSS	F232	INTRO TO DEV STUDIES	3	B	HEL
	ME	F241	MACHINE DESIGN & DRAWING	4	A-	
	ME	F242	IC ENGINES	2	B	
	ME	F243	PRODUCTION TECHNIQUES I	3	A-	
	ME	F244	KIN & DYN OF MACHINES	3	A	
	MGTS	F211	PRINCIPLES OF MANAGEMENT	3	A-	
					CGPA...8.49	

REGISTRAR

(Continued)

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI (RAJASTHAN) INDIA

TRANSCRIPT

ID NO 2013A4PS465H

NAME DESHMUKH MOHIT HARISHCHANDRA

	COURSE NO		COURSE TITLE	UNITS	GRADE	
SUMMER TERM 2014-2015	BITS	F221	PRACTICE SCHOOL I	5	A	
					CGPA...8.58	
FIRST SEMESTER 2015-2016	ME	F311	HEAT TRANSFER	4	B	
	ME	F312	ADV MECHANICS OF SOLIDS	3	A-	
	ME	F313	PRODUCTION TECHNIQUES II	4	B	
	ME	F376	DESIGN PROJECT	3	A	DEL
	ME	F432	COMPUTER AIDED MANUFACT	3	B	DEL
	ME	F443	QUALI CONTRO ASSUR & REL	3	A-	DEL
	ME	F483	WIND ENERGY	3	A-	DEL
					CGPA...8.60	
SECOND SEMESTER 2015-2016	ME	F266	STUDY PROJECT	3	A	EL
	ME	F341	PRIMEMOVERS & FLUID MACH	3	B-	
	ME	F342	COMPUTER AIDED DESIGN	4	A	
	ME	F343	MECHANICAL VIBRATIONS	3	A-	
	ME	F344	ENGINEERING OPTIMIZATION	2	A-	
	ME	F452	COMPOSITE MATERIAL & DES	3	A	EL
	ME	F484	AUTOMOTIVE TECHNOLOGY	3	A	EL
	ME	F485	NUM TECH FOR FLOW & HEAT TRANS	3	B	EL
					CGPA...8.71	
FIRST SEMESTER 2016-2017	HSS	F346	INTERNATIONAL RELATIONS	3	B	HEL
	ME	F366	LABORATORY PROJECT	3	A	EL
	ME	F377	DESIGN PROJECT	3	A	EL
					CGPA...8.75	
SECOND SEMESTER 2016-2017	BITS	F412	PRACTICE SCHOOL II	20	A	
					CGPA...8.91	

REGISTRAR

(Continued)

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI (RAJASTHAN) INDIA

TRANSCRIPT

ID NO 2013A4PS465H

NAME DESHMUKH MOHIT HARISHCHANDRA

SUMMARY

Admitted in: FIRST SEMESTER 2013-2014
To: B.E.(Hons.)(Mechanical)(with Practice School)
Last Registered: SECOND SEMESTER 2016-2017

Units Used in CGPA: 155
(This includes only courses with letter grades, excluding repetitions)
CGPA : 8.91

Degree(s) Completed:
B.E.(Hons.)(Mechanical)(with Practice School)
Division: FIRST

Fulfilled the academic requirements of graduation and became eligible for the award of the degree at the end of SECOND SEMESTER 2016-2017

Note: This programme has been conducted by BITS Pilani at its Hyderabad Campus, Hyderabad, India.

Date of approval by the Examination Committee: 06-JUL-2017

Date of Issue: 06-JUL-2017

REGISTRAR

Birla Institute of Technology and Science
Pilani, (Rajasthan) India

1. This transcript contains complete record of academic performance of the student given in a chronological order. For details the Academic Regulations as well as the Bulletin of the institute should be consulted.
2. The medium of instruction is English.
3. The academic year consists of two semesters and a summer term when required. The courses and the grades along with units are shown against each semester/term in which the student registered.
4. **Evaluation:**
   (a) The performance in most courses is spelt out in terms of letter grades A, A-, B, B-, C, C-, D, E. Each letter grade has a qualitative meaning and a grade point value as given below:

Letter Grade *	A	A-	B	B-	C	C-	D	E
Qualitative Meaning	Excellent	Very Good	Good	Above Average	Fair/Average	Below Average	Poor	Exposed
Grade Point	10	9	8	7	6	5	4	2

**Note : Among the letter grades mentioned above, the grades A-, B- and C- were introduced with effect from First Semester 2011-2012.*

   (b) In some courses, descriptive non-letter grades (Excellent; Good; Fair; Poor; Acceptable; Unacceptable; Satisfactory(S); Unsatisfactory(U); Above Average; Average; Below Average; Outstanding; Very Good; Continuing) are awarded which carry no grade point.
5. **CGPA:**
   The up-to date overall performance is reported by the Cumulative Grade Point Average (CGPA), which is a weighted average calculated as below:

$$CGPA = (u_1g_1 + u_2g_2 + u_3g_3 + \ldots\ldots) / (u_1 + u_2 + u_3 + \ldots\ldots)$$

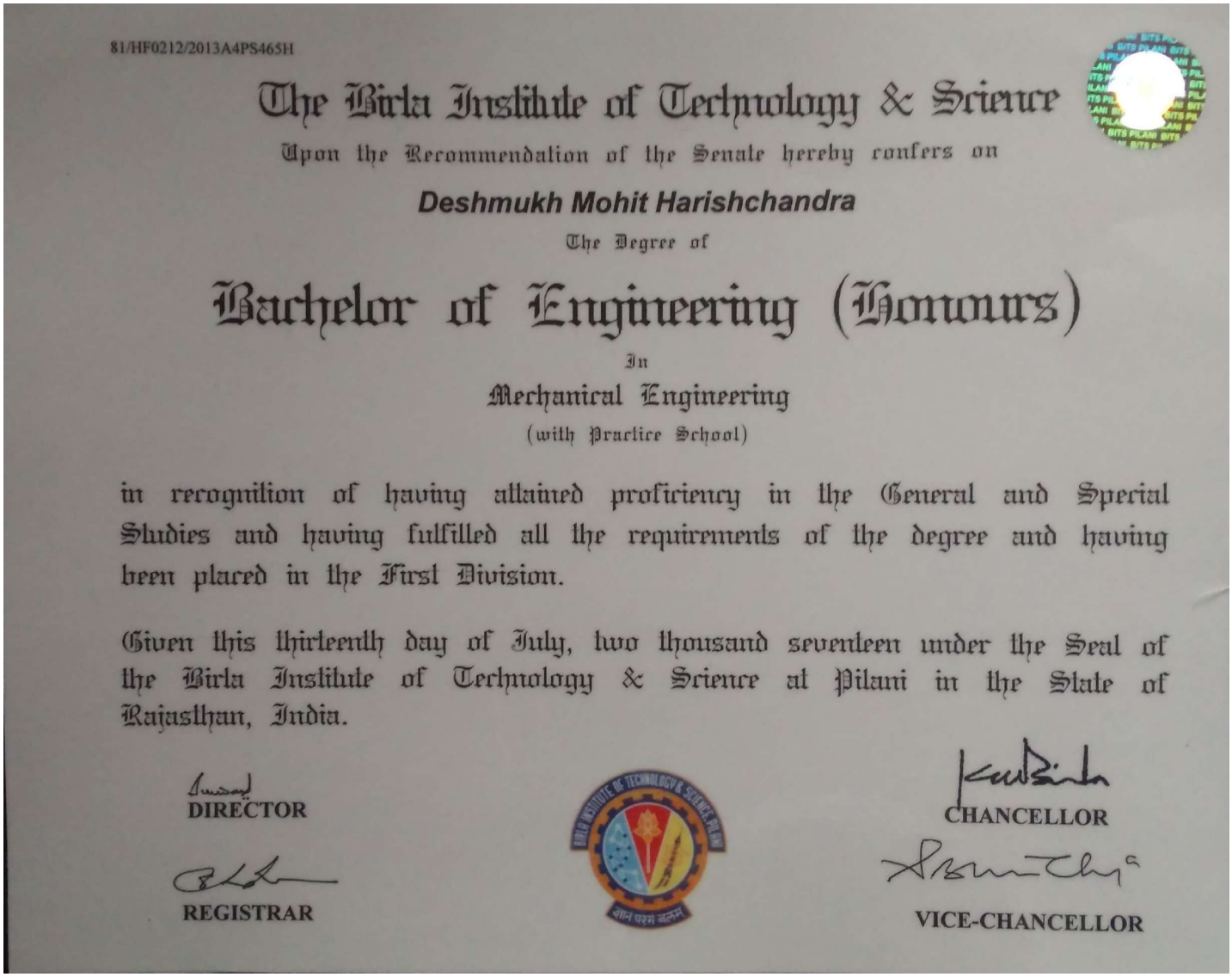
   where $u_1, u_2, u_3, \ldots$ denote units associated with the courses taken by the student and $g_1, g_2, g_3, \ldots\ldots$ denote grade points of the letter grades awarded in the respective courses. Whenever a student repeats a course and gets a new letter grade the new grade replaces the earlier grade in the calculation of the CGPA.
6. The other symbols & Reports used in the transcript are:

AU	-	Audit	XR	-	Previous grade 'X' repeated
DP	-	Discontinued from the Programme	RC	-	Registration Cancelled
EL	-	Elective	RRA	-	Required to Register Again
GA	-	Grade Awaited	S	-	Satisfactory
I	-	Incomplete	U	-	Unsatisfactory
NC	-	Not Cleared	W	-	Withdrawn
TGA	-	Thesis Grade Awaited	NA	-	Not Applicable
DEL	-	Discipline Elective	HEL	-	Humanities Elective

7. Optional elective (OE) is not a required component but if it is taken, the letter grade obtained is included in the CGPA. If the student is reported as NC in any one of the courses taken in this category, no further action is necessary.
8. **Flexibilities:**
   The system permits many academic and other flexibilities like : (a) Admission with marginal deficiency. (Additional remedial courses are prescribed, and when necessary programme duration is extended); (b) Admission with advanced standing (The courses for which exemption was given are listed in the transcript; such courses are not included in the CGPA. The CGPA and division, if applicable are awarded on the basis of only courses taken in the institute); (c) Transfer from one programme to another, before the completion of the first. (The accumulated units and CGPA in the previous programme are carried over as the input to the new programme); (d) working concurrently for two degrees out to the integrated first degree programmes (dual degree scheme); The requirements for both the degrees in the dual degree scheme are concurrently met. Consequently, the CGPA and the division awarded for the two degrees would be the same (e) Each programme in the first degree level or higher degree level offers a choice between Practice School and Thesis/Dissertation streams.
9. **Academic Counselling :**
   (a) The educational philosophy interlinks and at the same time distinguishes between the performance of a student in a single course and his overall cumulative performance. His progress and performance is monitored at the end of every semester/term by noting whether (i) he has secured more than one E grade in that semester/terms; (ii) he has obtained a CGPA less than 4.50 in case of integrated first degree programme and less than 5.50 in case of higher degree programme upto that semester/term; (iii) he has spent more than 50% extra time than what is prescribed for him up to that semester/terms in his programme.
   (b) Whenever a student's performance comes under the clauses (i), (ii) or (iii) in (a) above, the student comes under the purview of Academic Counselling Board (ACB) which would counsel him, temporarily restrict his options, may require him to transfer to another suitable programme or leave the institute if he is unable to meet the probationary conditions laid down by it.
10. **Eligibility Requirements :**
    A student has to obtain a minimum CGPA of 4.50 in case of integrated first degree programmes, a minimum CGPA of 5.50 in case of higher degree programmes and a minimum CGPA of 5.50 wherever applicable, in case of Ph.D. programmes to be eligible for the degree.
11. A long gap between the last semester of registration and the semester in which the student becomes eligible for the degree, may be due to delayed award of a grade because of late submission of some components of evaluation in a course/dissertation/thesis by the student.
12. **Division :** It is a classification based on CGPA as follows :

Distinction	:	CGPA 9.00 or more
I Division	:	CGPA 7.00 or more but less than 9.00
II Division	:	CGPA 4.50 or more but less than 7.00

(No division is awarded for diploma, higher degrees or Ph.D. programmes



81/HF0212/2013A4PS465H

The Birla Institute of Technology & Science

Upon the Recommendation of the Senate hereby confers on

Deshmukh Mohit Harishchandra

The Degree of

Bachelor of Engineering (Honours)

In

Mechanical Engineering

(with Practice School)

in recognition of having attained proficiency in the General and Special Studies and having fulfilled all the requirements of the degree and having been placed in the First Division.

Given this thirteenth day of July, two thousand seventeen under the Seal of the Birla Institute of Technology & Science at Pilani in the State of Rajasthan, India.

DIRECTOR

CHANCELLOR

REGISTRAR

VICE-CHANCELLOR

STATEMENT OF PURPOSE

I have always been a curious person. Especially about the complex and intricate mechanisms involved while making any product. In order to satisfy this interest, not only did I choose the undergrad program in mechanical engineering but also tried to go the extra mile while chasing it. Here I have tried to elaborate it along with my aspiration to continue discovering concepts at an advanced level.

I was fortunate to work on three projects during my undergrad program. The first was on development of a universal greenness index for buildings through multi-criteria decision making of their life-cycle parameters. While enjoying working on the project, it introduced me to MATLAB and its vast functionalities which I used to implement analytical hierarchy process. Consequently I established the rating system for buildings.

I got fascinated by applications of numerical analysis in heat transfer and fluid flow while studying it as an elective. Hence I chose the second project that involved determination of optimum residence time of slabs in a reheat furnace. This was done using FLUENT and the primary focus was radiation heat transfer. The project resulted in reduced computational time compared to previous implementations.

I also worked on an industry problem with one of my professors. An organisation had approached him for CFD analysis to determine the design of screw turbines. I used FLUENT to analyse the performance of screw turbines based on various flow parameters. The output was an empirical relationship between RPM and power produced by the turbine. I went on to present these results at a national level conference.

I interned at Aditya Birla Management Corporation in my last semester. They provide service and support to all the manufacturing plants of the conglomerate. Here my job involved predicting energy consumption in cement manufacturing process. To achieve this, I used neural networks. Later on we used global optimisation to get the optimum parameters. In addition sensitivity analysis was done for energy consumption with respect to all the operating parameters. The project culminated with me designing a desktop application that calculated the optimum parameters.

In my seventh semester I was selected to be a ‘Teaching Assistant’ for the course ‘fluid mechanics’. My responsibility was to suggest minor changes to coursework, grading class tests, preparing question banks etc. This period helped me understand the challenges in academia. Furthermore I developed an interest to pursue a career in this field. In this regard, I believe Purdue University would be a great place for me to hone my skills.

I am also interested to do research in the branches HVAC, refrigeration and heat transfer. After going through several interesting works of the professors, I found Prof. James E. Braun’s work on building energy system to be exciting. The process of applying distributed optimisation algorithms in multi-agent framework intrigued me the most. To sum up, I am passionate about the topics discussed above and Purdue University would be the perfect platform for me to learn more and do research in them.

Resume

Name:	Mohit Harishchandra Deshmukh	Email :	mohit.bits.md@gmail.com
Mobile :	+918185861591	Linkedin:	www.linkedin.com/in/mohit-deshmukh

ACADEMIC DETAILS

COURSE	SPECIALIZATION	INSTITUTE/COLLEGE	BOARD/UNIVERSITY	% CGPA	YEAR
BE	Mechanical	BITS PILANI Hyderabad Campus	Birla Institute of Technology and Science, Pilani	8.91	2017
XII	Science	Pratibha Niketan Mahavidyalay	HSC	81.67	2013
X	General	Sainik School Satara	CBSE	87.4	2011

TECHNICAL PROFICIENCY

Software skills	Creo, AutoCAD, ANSYS (Fluent and Mechanical APDL),Advanced Excel
Programming skills	MATLAB, JAVA , Python

SUMMER INTERNSHIP/WORK EXPERIENCE

1.Aditya Birla Management Corporation Pvt Ltd (Internship) **Jan 2017 – June 2017**

Projects:

1. Determination of Optimum Parameters for a Vertical Rolling Mill: Data for six month on hourly basis timestamps was used to train the neural network. Global optimisation was performed using multistart function. A desktop based application was developed to predict the optimum parameters.
2. Detection and Diagnosis of Controllers: Process variable was used as an input to obtain the performance indices. Spectral analysis is done to check the oscillations in the controller manually. The performance indices are compared to confirm the diagnosis of the controller.

2.Capgemini India Pvt Ltd (Full Time) **Aug 2017 – Till Present**

Project:

Development of an online recruitment management system using spring hibernate framework of JAVA.

PROJECTS

Universal index for assessing greenness of buildings **Aug 2015 - Dec 2015**

The aim of this project was to develop a universal greenness index. The method used was analytical hierarchy process. MATLAB was used for computations. The project was completed with the development of a program to assess the buildings.

Review of research areas and applications of Shape Memory Alloys **Jan 2016 - May 2016**

This project was a review of research work in SMA. The martensitic transformations and their effect on shape memory were studied in elaboration. The applications of shape memory alloys in robotics were also the focus of study.

Numerical Modelling and Simulation of Radiation Heat transfer in an enclosure **Aug 2016 - Dec 2016**

This project aimed at reducing the computational cost of determination of optimum residence time of slabs in a walking beam type reheat furnace. The outcome of the project was a novel computational method for the analysis.

PUBLICATION DETAILS

Performance investigation on sustainable screw turbine using computational fluid dynamics for micro and Pico-hydro applications **Mar 2017**

Published Journal, Proceedings of the National Conference on Sustainable Mechanical Engineering: Today and Beyond, at Tezpur University, India

Short Description: In this study, the performance of a uniformly pitched double start closed trough screw turbine is analysed for the fluid flow characteristics through variation of its operating conditions using sliding mesh method in computational fluid dynamics (CFD). The analysis gives the design of the screw turbine required for expected power output.

POSITION OF RESPONSIBILITY at BITS PILANI Hyderabad Campus **Aug 2016 - Dec 2016**

Teaching Assistant, Fluid Mechanics

AWARDS and Certifications

Won first prize in a **CREO** based design event at ATMOS. **2015**

Part of a group which participated in poster presentations in conference Design and Product Life Cycle held in the college. **2016**

Oracle Certified Associate Java SE 7 Programmer I **2017**

https://www.youracclaim.com/badges/71a24b7e-5015-4086-9e2e-b32f6356c5d8/public_url

EXTRA CURRICULAR ACTIVITIES

My team was runner up in an eight ball pool tournament at college. **2014**