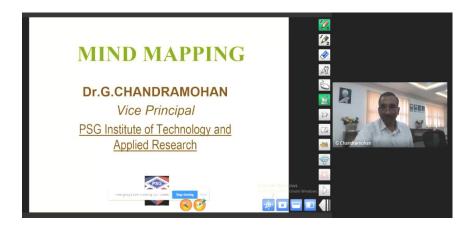
# PSG Institute of Technology and Applied Research Quarterly Report April - June 2020

## Events Organized: Online Webinar on "Mind Mapping"

An online webinar on "Mind Mapping" was conducted by Dr.G.Chandramohan, Vice-Principal, PSG iTech on 23.05.2020. About 140 staff members of various PSG Institutions attended the session through the online platform Google Meet. The programme was inaugurated by Dr.R.Rudramoorthy, Director, PSG CARE. The participants were briefed on the technique of creating mind map for academic purpose with real life examples. The webinar was organized by PSG CARE.



Online Webinar on "Mind Mapping" conducted by Dr.G.Chandramohan, Vice-Principal, PSG iTech on 23.05.2020

# Guest Lecture for School Teachers on "Conducting Online Classes"

A Guest Lecture for school teachers on "Conducting Online Classes" was delivered by Dr.G.Chandramohan, Vice-Principal, on 22.06.2020 at Mechanical Seminar Hall, PSGiTech. 30 school teachers from PSG School, Vedapatti, PSG Primary School, Peelamedu and GRD CPF School attended the training programme. The programme was presided by Dr.B.Ramamoorthy, Advisor (Academic), PSG Institutions. Dr.P.V.Mohanram, Principal, PSGiTech proposed the vote of thanks. The participants were trained in conducting online classes using Google Meet, Google Form, Google Calendar and Google Classroom. The participants were also exposed to the use of ELMO projector for taking online classes.



Participants of the programme during the Guest Lecture for school teachers held on 22.06.2020

# Training Programme for PSG Sarvajana High School Teachers

The training programme for PSG Sarvajana High School teachers on "Conducting Online Classes" was held at Centre for Active Learning, PSG Institute of Management. The programme was co-ordinated by Dr.G.Chandramohan, Vice-Principal, PSGiTech on 29.06.2020. Mr V Navin Ganesh, AP/Civil and Mr Sudhakar, NMC have helped the participants in the training programme. 24 school teachers from PSG Sarvajana High School attended the training programme. The programme was presided by Dr.B.Ramamoorthy, Advisor (Academic), PSG Institutions and Dr.Vijaya, Director,



PSG Institute of Management. The participants were provided hands-on training on conducting online classes using Google Meet, Google Form, Google Calendar, Google Drive and Google Classroom. The participants were also demonstrated the use of ELMO projector for taking

online classes.

Training programme for PSG Sarvajana High School teachers on "Conducting Online Classes" conducted by Dr.G.Chandramohan, Vice-Principal, PSG iTech held on 29.06.2020

<b>Details of On-line Coursera</b>	courses	completed	by	students	as o	on	30.06.2020	during
Lock-Down period		-	•					-

			Detail	s of Cou	irsera co	urses				
Year	IB	E	II F	BE	III	BE	IV	BE	Tot	tal
Department	No. of Students	No. of Courses								
Civil	10	45	24	109	20	62	-	-	54	216
CSE	22	69	43	148	16	47	09	29	90	293
ECE	41	138	26	118	05	15	01	01	73	272
EEE	20	45	35	200	24	68	17	49	96	362
Mechanical	28	84	39	90	40	121	05	12	112	307
Total num	ber of st	udents	who con	npleted	Courser	a cours		g lock- period	425	1450

# Details of On-line classes conducted by PSGiTech faculty during the Lock-Down Period as on 30.06.2020

Year Department	I BE (h)	II BE (h)	III BE (h)	IV BE (h)	Total (h)	e Period
Civil	$66\frac{1}{2}h$	$6\frac{1}{2}h$	11h	3h	~87h	21.04.2020 to 30.06.2020
CSE	$53\frac{1}{2}h$	23h	$28\frac{1}{4}h$	8h	~113h	24.04.2020 to 30.06.2020
ECE	$77\frac{1}{2}h$	$13\frac{3}{4}h$	17h	-	~108h	22.04.2020 to 12.06.2020
EEE	$63\frac{1}{2}h$	$50\frac{3}{2}h$	52h	-	~166h	23.04.2020 to 04.07.2020
Mechanical	$63\frac{1}{4}h$	$20\frac{1}{2}h$	15 <u>-</u> 1	4h	~103h	21.04.2020 to 30.06.2020
		On-line	Net e classes c	hours of ompleted	577h	

# Syllabi completed, but not recorded

@ Classes are continuing

# Details of On-line Coursera courses completed by faculty and staff as on 07.06.2020 during the Lock-Down period

Department	No of faculty who took the courses	No of courses completed
Civil	09	85
CSE	10	36
ECE	14	41
EEE	11	44
Mechanical	9	79
Science and Humanities	9	32
Supporting staff	5	5
Total	67	322

## Presentation Session on NBA-SAR

IQAC of PSGiTech conducted a presentation session on their respective SAR (NBA) prepared by Department of Mechanical Engineering & Department of Electronics and Communication Engineering. The presentations were made by respective HoD's on 25.06.2020 (Thursday). It was attended by ten faculty members including Principal, Vice Principal and various HoD's.



Dr P Vetrivelan, HoD (i/c) Dept. of ECE presenting his department NBA presentation

## **Review Session on NBA-SAR**

IQAC of PSGiTech conducted a review session by Dr G Sankarasubramanian, Former Professor and HoD, Civil Engineering, PSGTech, on SAR (NBA) prepared by Department of Mechanical Engineering & Department of Electronics and Communication Engineering. The session was conducted in Civil Engg. Seminar hall on 26.06.2020 between 9.30 am to 1.30 pm. Twenty faculty members across all the departments including Principal, Vice Principal and HoDs attended the session.



Dr P Subbaraj, Dean(Electrical Sciences) presenting a memento to Dr G Sankarasubramanian, Former Professor, Civil Engineering, PSGTech during the review session on NBA-SAR on 26.06.2020

# Programmes attended by faculty (face - to - face)

S.No	Name of the faculty	Programme Title	Date	Guest faculty
Dept	of Civil			
1	Dr MI Abdul Aleem	-		
2	Mr P Balakumar	_		
3	Mr V Navin Ganesh	-		
Dept	of CSE	-		
4	Dr R Manimegalai	-		
5	Ms Priya Ponnusamy	-		
Dept	of ECE	-		
6	Dr P Vetrivelan	-		
7	Dr P Reba			
Dept	of EEE	- Suggestions to improve SAR		Dr G Sankara
8	Dr C L Vasu	document of	26.06.2020	Subramanian Former
9	Dr CS Subashkumar	- NBA		Professor
Dept	of Mech Engg	<u>Venue :</u> PSG iTech		PSG Tech
10	Dr P V Mohanram	_ PSG 11ech		
11	Dr G Chandramohan	_		
12	Dr N Saravanakumar	_		
13	Dr R Ramesh	_		
14	Dr D Elangovan	-		
15	Dr M Manojkumar	-		
16	Dr K Sivanandhadevi	-		
17	Mr C Gopalakrishnan	-		
18	Mr S Avinashkumar	-		
	of Science and anities			
19	Dr R S Sankarasubramanian	1		
20	Dr V Chitra	1		
21	Mr P Gajendran	-		

# **Details of IQAC Meetings conducted**

The SKYPE based IQAC Review Meetings were held from 27/03/2020 (Thursday) and onwards for the Compilation and Preparation of National Board of Accreditation (NBA) – Self Assessment Report (SAR). The details of the meetings held are summarized below including the introductory meeting (Criterion 2: Program Curriculum and Teaching–Learning Processes) held on 20/03/2020 (Friday):

S.No.	Details of Discussion (Key points)	Current Status	Key Decisions Taken/ Works Ahead/ Amendments (if any)	Responsibility / Targets #	Number of Faculty Members Participated
1	Criterion 2: Program Curriculum and Teaching– Learning Processes	Compilation Status Updated, Reviewed, and Discussed on: <u>20/03/2020</u> (Friday) <u>9:00 am to</u> <u>3:30 pm</u>	Detailed Interaction / Discussion with various Take-Aways communicated on: <u>20/03/2020 (Friday)</u> <u>9:00 am to 3:30 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	25
2	<u>Criterion 5:</u> Faculty Information and Contribution	Compilation Status Updated, Reviewed, and Discussed on: <u>27/03/2020</u> ( <u>Thursday)</u> <u>10 am to 11.45 am</u>	Minutes of the Meeting Circulated through E-mail on: <u>28/03/2020</u> <u>(Friday)</u> <u>9:31 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	9
3	Criterion 1: Vision, Mission and Program Educational Objectives	Compilation Status Updated, Reviewed, and Discussed on: 28/03/2020 (Friday) 10 am to 11.30 am	Minutes of the Meeting Circulated through E-mail on: <u>29/03/2020</u> ( <u>Saturday)</u> <u>11:53 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	6
4	<u>Criterion 3</u> : Course Outcomes and Program Outcomes	Compilation Status Updated, Reviewed, and Discussed on: <u>30/03/2020</u> ( <u>Monday</u> ) <u>10 am to 11.45 am</u>	Minutes of the Meeting Circulated through E-mail on: <u>31/03/2020</u> <u>(Tuesday);</u> <u>10:38 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	11
5	Criterion 3 : Course Outcomes and Program Outcomes	IQAC Review Meeting <u>29/03/2020</u> <u>(Saturday)</u> <u>10 am to 12 pm</u>	Detailed Interaction / Discussion with various Take-Aways communicated on: <u>29/03/2020</u> <u>(Saturday)</u> <u>10 am to 12 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	6

S.No.	Details of Discussion (Key points)	Current Status	Key Decisions Taken/ Works Ahead/ Amendments (if any)	Responsibility / Targets #	Number of Faculty Members Participated
6	<u>Criterion 6 :</u> Facilities and Technical Support	Compilation Status Updated, Reviewed, and Discussed on: <u>01/04/2020</u> (Wednesday) 10 am to 12 noon	Minutes of the Meeting Circulated through E-mail on: <u>02/04/2020</u> <u>(Thursday)</u> <u>06:48 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	11
7	<u>Criterion 6 :</u> Facilities and Technical Support	IQAC Review Meeting <u>02/04/2020</u> (Thursday) 10 am to 12 noon	Detailed Interaction / Discussion with various Take-Aways communicated on: <u>02/04/2020</u> <u>(Thursday)</u> <u>10 am to 12 noon</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	6
8	<u>Criterion 4 :</u> Students' Performance	Compilation Status Updated, Reviewed, and Discussed on: <u>03/04/2020</u> ( <u>Monday)</u> <u>10 am to 12.40 pm</u>	Minutes of the Meeting Circulated through E-mail on: <u>04/04/2020</u> <u>(Saturday)</u> <u>08:12 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	12
9	<u><b>Criterion 4 :</b></u> Students' Performance	IQAC Review Meeting <u>04/04/2020</u> <u>(Tuesday)</u> <u>10 am to 12 noon</u>	Detailed Interaction / Discussion with various Take-Aways communicated on: <u>04/04/2020</u> <u>(Tuesday)</u> <u>10 am to 12 noon</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	5
10	<b>Criterion 8:</b> First Year Academics	<u>24/04/2020</u> <u>(Friday)</u> <u>10 am to 01.00 pm</u>	Detailed Interaction / Discussion with various Take-Aways communicated on: <u>24/04/2020 (Friday)</u> <u>10 am to 01.00 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	20
11 to 15	<u>Criterion 8:</u> First Year Academics	IQAC Review Meeting <b>24/04/2020</b> (Friday) to 25/04/2020 (Saturday)	Detailed Interaction / Discussion with various Take-Aways communicated from 24/04/2020 (Friday) to 25/04/2020 (Sat)	Department NBA-SAR Criteria Coordinators and HoDs Concerned	20
16	<u>Criterion 10:</u> Governance Institutional Support and Financial Resources	<u>27/04/2020</u> ( <u>Monday)</u> <u>10 am to 12.40 pm</u>	Detailed Interaction / Discussion with various Take-Aways communicated on: <u>27/04/2020</u> <u>(Saturday)</u> <u>10 am to 12.40 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	10

S.No.	Details of Discussion (Key points)	Current Status	Key Decisions Taken/ Works Ahead/ Amendments (if any)	Responsibility / Targets #	Number of Faculty Members Participated
17 to 20	<b><u>Criterion10</u></b> : Governance Institutional Support and Financial Resources	IQAC Review Meeting <b>24/04/2020</b> (Friday) to 01/05/2020 (Friday)	Detailed Interaction / Discussion with various Take-Aways communicated from 24/04/2020 (Friday) <u>to 01/05/2020</u> (Friday)	Department NBA-SAR Criteria Coordinators and HoDs Concerned	10
21	Criterion 9: Student Support Systems	<u>02/05/2020</u> <u>(Saturday)</u> <u>10 am to 12.40 pm</u>	Detailed Interaction / Discussion with various Take-Aways communicated on: <u>02/05/2020</u> ( <u>Saturday)</u> 10 am to 12.40 pm	Department NBA-SAR Criteria Coordinator and HoDs Concerned	15
22 to 25	Criterion 9: Student Support Systems	IQAC Review Meeting 02/05/2020 (Saturday) to 04/05/2020 (Monday)	Detailed Interaction / Discussion with various Take-Aways communicated from <u>02/05/2020</u> (Saturday) to <u>04/05/2020</u> (Monday)	Department NBA-SAR Criteria Coordinators and HoDs Concerned	15
26	NBA Review meeting	05/05/2020 (Tuesday) 3 pm to 5 pm	Minutes of the Meeting Circulated through E-mail on: <u>09/05/2020</u> <u>(Saturday)</u> <u>04:31 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	20
27 to 30	Criterion 7: Continuous Improvement and NBA Review meeting	IQAC Review Meeting 06/05/2020 (Wednesday) 22/05/2020 (Friday) and 13/06/2020 (Saturday)	Detailed Interaction / Discussion with various Take-Aways communicated from <u>06/05/2020</u> (Wednesday) <u>22/05/2020 (Friday)</u> <u>and 13/06/2020</u> (Saturday)	Department NBA-SAR Criteria Coordinators and HoDs Concerned	20
31	NBA Review meeting and NIRF Initiatives	<u>17/06/2020</u> (Wednesday) 10 am to 12.30 pm	Minutes of the Meeting Circulated through E-mail on: 20/06/2020 (Friday) <u>10:30 pm</u>	Department NBA-SAR Criteria Coordinators and HoDs Concerned	14

S.No.	Details of Discussion (Key points)	Current Status	Key Decisions Taken/ Works Ahead/ Amendments (if any)	Responsibility / Targets #	Number of Faculty Members Participated
32	NBA Review	IQAC Review	Detailed Interaction /	Department	9
02	meeting	Meeting	Discussion with	NBA-SAR	
		25/06/2020	various Take-Aways	Criteria	
		<u>(Thursday)</u>	communicated on	Coordinators	
		<u>9 am to 01.30 pm</u>	<u>25/06/2020</u>	and HoDs	
			<u>(Thursday)</u>	Concerned	
			<u>9 am to 01.30 pm</u>		
33	<b>Pilot Review</b>	By	Detailed Interaction /	Department	23
00	of SAR I	Dr.G.Sankara	Discussion with	NBA-SAR	
		subramanian,	various Take-Aways	Criteria	
		Former	communicated on	Coordinators	
		Professor and	<u>26/06/2020 (Friday)</u>	and HoDs	
		Head /Civil /	<u>9 am to 01.30 pm</u>	Concerned	
		<b>PSG Tech</b> with			
		IQAC Review			
		Meeting			
		26/06/2020			
		<u>(Friday)</u>			
		<u>9 am to 01.30 pm</u>			

## First National Conference on "Communication System & Design 2020 (NC<sup>2</sup>SD 2020)"

The Department of Electronics and Communication Engineering organized a one day First National Conference on "Communication System & Design 2020 (NC<sup>2</sup>SD 2020)" on 29<sup>th</sup> June 2020. This conference provided a common forum for budding electronics and communication engineers to meet and exchange knowledge and experiences. Thereby, finding innovative approaches and feasible solutions to build the nation with the latest technologies. Dr. P. Subbaraj, Dean (Research) inaugurated the conference and welcomed the gathering. Dr.E.Malar, Professor, EEE department, Dr.P.Vetrivelan, Associate Professor & HoD(i/c), ECE department along with organising secretaries and faculty colleagues from the department released the proceedings of the conference.



Release of conference proceedings by Dr.E.Malar, Professor, EEE department -NC<sup>2</sup>SD2020 held on 29<sup>th</sup> June 2020

Mr.Jeyasingh Pathrose, Chief Technology Officer, Jasmin Infotech, Chennai, delivered the keynote address on Technological Advancement and its Applications. The key points discussed by the speaker were:

- 1. Future Direction of the Enterprise –The Digital Era is transforming into the Information Era
- 2. Current technologies that characterize knowledge
- 3. IoT provides several vertical opportunities
- 4. Top 10 AI healthcare applications
- 5. Future of Manufacturing Industry, Smart Transportation
- 6. Smart Educational services, Smart farming etc.

The keynote address was followed by presentation of papers based on research through Google Meet platform. There were 3 parallel sessions and 26 research papers were presented by authors from various institutions. The details of the sessions are furnished below:

Session – 1A	Session – 1B	Session – 1C
Chair : Dr.E.Malar Professor, EEE dept., PSGiTech	Chair : Dr.A.C.Sumathi Assistant Professor (Sl.Gr), CSE dept., PSGiTech	Chair : Dr.S.Thenmozhi Associate Professor, ECE dept., Dayananda Sagar College of Engineering, Bangalore.
Co - Chair: Dr.M.Jayasanthi Associate Professor – ECE, PSGiTech	Co - Chair : Dr.P.Reba Associate Professor - ECE, PSGiTech	Co – Chair: Dr.G.Santhanamari Associate Professor - ECE, PSGiTech

The proceedings and e- certificates were issued to all authors of the registered research papers. Dr.P.Vetrivelan, Associate Professor, HoD (i/c) - ECE delivered the vote of thanks and motivated the students and faculty to conduct many such conferences. Dr.S.Vanitha, Associate Professor, Mr.M.Jothibasu, Assistant Professor (Senior Grade) and Ms.M.Sowmiya, Assistant Professor were the organizing secretaries for the conference.

# National Conference on Emerging Technologies for Electric Vehicles and Smart Grid Integration

The National Online Conference on "Emerging Technologies for Electric Vehicles and Smart Grid Integration" was conducted by the Department of EEE, PSG Institute of Technology and Applied Research, Coimbatore on July 1 & 2, 2020. It provided a common platform for faculty members, researchers, industry experts and students to discuss the advances and recent trends in this area. Dr.Subbaraj P Dean (Research) inaugurated the conference and the conference was presided by Dr. Vasu C.L., Professor & Head / EEE. On July 1<sup>st</sup>, twelve research papers were presented through Google Meet platform on IoT and Automation Systems Track and Dr.E.Malar Professor/EEE was chairperson for this session. Dr. Geetha Mani, Associate Professor, VIT, Vellore was the expert speaker. She shared her findings on research work on Fuel Cell Modelling and Control.

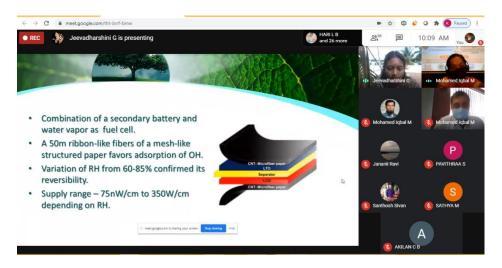


Conference Team Members of the National Online Conference on "Emerging Technologies for Electric Vehicles and Smart Grid Integration" held on 1<sup>st</sup> July 2020

On 2<sup>nd</sup> July, Dr. Enamul Haque, Senior Lecture, Deakin University, Australia was the expertspeaker; He shared his views on Grid Integration of Renewable Energy System: Control Strategies, Impacts and Challenges. The key points delivered to the audience by the speakers were:

- 1. Ongoing research activities in the field of fuel cells
- 2. Necessity of providing simple solutions to the engineering problems especially in wind energy systems
- 3. Hybrid electric vehicle charging

Fourteen research papers were presented through Google Meet platform on 2<sup>nd</sup> July, 2020. Dr. Subash Kumar C. S. Associate Professor/ EEE was chairperson for this session. As a whole, 26 research papers were presented by authors from various institutions. Two best papers from each track were identified for awards. All authors of who presented their work were issued E-Certificate. The conference ended with a positive note from participants to conduct many such conferences in the years to come.



Participant Ms. Jeevadharshini presenting her findings

#### Awards and Achievements

## 1. CSIR Summer Research Training Programme (CSIR-SRTP) 2020

Mr.S.Elayaraja, AP(Sl.Gr)/Civil, Dr Jayasanthi, Asso Prof/ECE and Dr K Balaji, AP(Sl.Gr)/Chemistry have been selected for the CSIR Summer Research Training programme 2020 at CSIR-CBRI Roorkee under the mentorship of Dr.Debi Prasanna Kanungo (Senior Principal Scientist)

## 2. ICACI Student Chapter Scholarship

Deryl James (IV Year) and Monis Mouli (III Year) of Civil Engg Department have been selected for the ICACI Student Chapter Scholarship. Both received a sum of Rs.15,000/- each.

Chapter Coordinator & Mentor: Mr.S.Elayaraja AP(Sl.Gr)/Civil

## 3. ACI Outstanding Student Chapter Award

The student chapter of American Concrete Institute at PSG Institute of Technology and Applied Research has received the Outstanding Student Chapter Award 2020. Chapter Mentor: Mr.S.Elayaraja AP(Sl.Gr)/Civil

## 4. TNSCST - Student Project Scheme

Dr R Manimegalai, HoD,CSE, Mr S Elayaraja, AP(Sl.Gr), Civil and Mr M Senthilvel, AP,Mech were sanctioned the financial support of Rs 25,000/- each under Student Project Scheme from Tamilnadu State Council Science and Technology.

## 5. Advanced Level Instructor

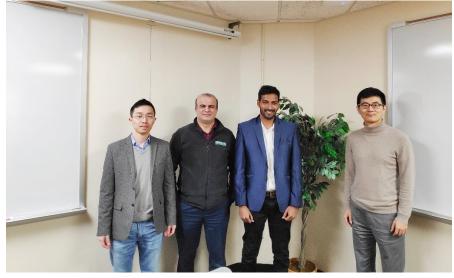
Dr AC Sumathi and Mr S Thivaharan of CSE Dept received Instructor Excellence Award from CISCO Networking Academy, Asia Pacific Region.

# Advanced Manufacturing Course completed by faculty abroad during the period February to June 2020

Mr J Nagarjun, Asst. Prof (Sr.Gr), Dept. of Mechanical Engineering has completed the following Advanced Manufacturing Courses at Binghamton University, Newyork as a Visiting Scholar between 10/02/2020 and 30/06/2020. The faculty attended and completed both off line and on-line classes of the following courses in the Industrial Engineering Department.

- 1. SSIE 585 Additive Manufacturing Processes and Systems with Professor Jia Deng
- 2. SSIE 612 Advanced Topics in Integrated Manufacturing with Professor Fuda Ning

Further, the visit provided opportunity to interact with the Binghamton University faculty and learn their teaching learning process of the courses such as Design of Mechanical Elements and Concepts of Engineering Design. The experience of interaction with the faculty helped with the understanding of choice-based credit system and subject evaluations. The visit helped to gain experience working in the state of art Additive Manufacturing Laboratories. The visit further helped to initiate a joint research with Dr Fuda Ning in the area of Ph.D. (Additive manufacturing). With the outline of Research was discussed and finalized, the research commenced but was unable to be completed because of COVID Lockdown in the Binghamton campus. It is planned to complete the research in the PSG iTech campus.



From Left to Right: Dr. Jia Deng, Dr. Mohammed T Khasawneh, Mr. Nagarjun J and Dr. Fuda Ning.

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Thomas J. Watson School of	Engineering and Applied Science	
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r. Fuda Ning ssistant Professor	Dr. Mohammad Khasawneh Professor and Chairman of the	
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