

**NATIONAL ENGINEERING COLLEGE, K.R.NAGAR, KOVILPATTI-628503**  
**(An Autonomous Institution- Affiliated to Anna University Chennai)**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**Title of the Focus Group : Data Science**

Faculty In charge : Dr.V.Kalaivani

Faculty Members : Ms.V.Anusuaya Devi

Major Goal (Not more than 200 words):

Design of automated methods to analyze massive and complex data in order to extract useful information.

Vision:

To greatly expand the capacity to implement data science research, industry collaborations, educational programming, and the availability of cutting-edge computational tools.

Mission:

- To advance the state-of-the-art in data science;
- To ensure the responsible use of data to benefit society.

Activities planned for the academic Year 2018-19:

- To provide Industrial exposure to students in data science through our Alumni
- To enhance their knowledge in tools like R, etc.,
- To conduct workshop/seminar with hands on training
- To develop projects and getting fund.
- To publish Scopus indexed journal publications
- To conduct International collaboration by online expert lecture etc with leading universities

**AcheivementStaus(June'18-May'19):**

Focus Group activities Conducted:

Details of Event Participations:

List of Publications(Faculty/Scholar/Students):

Particulars of MoU/Consultancy/Patents/etc:

Details of Seminar Grants:

Funded Student Projects:

National/ International achievements:

## **Title of the Focus Group: Theory and Algorithms**

**Faculty In charge:** Dr. K.MohaideenPitchaiAsso. Prof(SG)/CSE

### **Faculty Members:**

1. Ms.M.Bhuvaneswari AP(SG)/CSE
2. Ms.R.Rajakumari AP(SG)/CSE
3. Mr.S.Dheenathayalan AP/CSE
4. Ms.V.Jyothirbindhu AP/CSE
5. Ms.D.ThamaraiSelvi AP/CSE

### **Major Goal (Not more than 200 words):**

The main goal of this group is to

- Conduct advanced research in classical as well as emerging areas of Theoretical Computer Science.
- Support and co-ordinate the activities related to the funded projects in the area of Theoretical Computer Science.
- Build and maintain necessary infrastructure for conducting experimental / animated studies of concepts and methodologies in Automata Theory, Computational Geometry, Parallel and Randomized Algorithmics and other related topics.
- Act as a resource centre for developing courseware for basic as well as advanced topics in Theoretical Computer Science.
- Support activities related to publishing, disseminating and archiving the research reports / papers of students and staff members of the department in all areas of Theoretical Computer Science.

**Vision:**

To establish a funded Centre of Excellence for Theoretical Computer Science.

**Mission:**

1. Perform cutting edge research and initiating new sublines of research in Theoretical Computer Science.
2. Create professional, enthusiastic and innovative team for providing consultancy solution in Theoretical Computer Science.

**Activities planned for the academic Year 2018-19:***Seminar Proposal*

1. A Seminar grant proposal on “Novel security mechanisms for defense applications” to DRDO is under preparation by Ms. R. Rajakumari and Ms.D.ThamaraiSelvi. The proposal will be submitted to the DRDO within June 2018.
2. Mr. S.Dheenathayalan and Ms.V.Jyothirbindhu are instructed to prepare a workshop proposal to CIIL Mysore. The same will be submitted before 15<sup>th</sup>July 2018.

*Student Project Proposal*

3. All the other staff members in the focus group was instructed to submit a student project proposal funding to TNSCST/IE(I)/IEEE/ NEC Alumni Association
  1. The staff members who wish to apply for IE(I) are requested to submit their proposal on or before July 2018
  2. The Staff members who wish to apply for other agency are requested to submit their proposal during call for by the agency

### *Publications*

3. All focus group members are planned to publish the student's mini project work in International conference within this semester and publish the student's main project work in International conference/scopus indexed journals within February 2019.

### *Research Project Proposal*

4. Dr. K. MohaideenPitchai and Ms. M. Bhuvaneshwari have submitted a DST FIST proposal as Co-Investigators on June 15th 2018.
5. Dr. K. MohaideenPitchai, Ms. M. Bhuvaneshwari and Ms. R.Rajakumari planned to submit a research project proposal to funding agency (ICMR/DST/UGC) within this semester.

### **Achievement Status (June'18-May'19):**

#### *Details of Event Participations:*

1. Mr. S.Dheenathayalan has attended the Industry Know How Programme in BIZPLUS, Chennai from 11<sup>th</sup> June 2018 to 16<sup>th</sup> June 2018.
2. Dr. K.MohaideenPitchai is going to attend the Industry Know How Programme Adroit Soft India Ltd Chennai from 25<sup>th</sup> June 2018 to 30<sup>th</sup> June 2018.

#### *List of Publications (Faculty/Scholar/Students): Nil*

#### *Particulars of MoU/Consultancy/Patents/etc:*

- One patent has been filed for the idea "System and Method for cardless transactions using an automated trailer machine(ATM)"

#### *Details of Seminar Grants:*

1. A proposal for organizing an instructional course on "Algorithmic Game Theory" was submitted by Dr. K.MohaideenPitchai and Ms.M.Bhuvaneshwari to Indian Association for Research in Computing Science (IARCS) during May 2018. The same was approved by IARCS and it will be organized during second week of July 2018.

*Funded Student Projects:*

1. A proposal for student project funding entitled automatic floor mopping robot was submitted by Dr. K.MohaideenPitchai and Mr.S.Dheenathayalan toNewGen IEDC and completed two level of presentation. This will be presented in advisory committee meeting for recommending fund.

*National/ International achievements: Nil*

**Title of the Focus Group:      Application**

**Faculty In charge:** Dr.V.Kavidha, Associate Professor/CSE

**Faculty Members:** 1. Mr.D.VijayaKumar,AP(SG)/CSE

2. Ms.S.Arunpriya,AP/CSE

3. Mr.K.Rajkumar,AP/CSE

4. Ms.S.Svaitha,AP/CSE

5. Ms.K.Usharani,AP/CSE

6. Ms.G.Kavitha,AP/CSE

**Major Goal (Not more than 200 words):**

The Application Group was started in june 2018 in our Department is accommodated with six staff members.The faculty members in application group are actively engaged in furnishing target activities for this academic year 2018-2019.

**Vision:** To produce globally competent, innovative and socially responsible computing professionals in teaching

**Mission:** 1. To gain world class teaching learning and research knowledge .

2. To cultivate awareness about emerging trends through self initiative.

3. To collaborate with industries,academic and Research organizations.

**Activities planned for the academic Year 2018-19:**

1. Effectively implementing OBE as per approved course plan
2. Active participation FDTP/STTP/Seminar/Workshop per year relevant to the courses taught and in their areas of specialization/teaching pedagogy.
3. Participation in Industrial Internship
4. Funded Seminar/Workshop organized
5. Students Publications -National/International Level (Conference/Journal)
6. Submitting the proposals to TNSCST/IE(I)
7. Staff Publications in reputed Journals
8. Prepare and submit at least one research proposal for funding projects with coordination of subordinates in their area of domain.
9. Coordinate student internship with/without stipend and minimum of 3 months duration

**AcheivementStaus(June'18-May'19):**

Focus Group activities Conducted:

Details of Event Participations:

List of Publications(Faculty/Scholar/Students):

Particulars of MoU/Consultancy/Patents/etc:

Details of Seminar Grants:

Funded Student Projects:

National/ International achievements:

**Title of the Focus Group: Machine Learning**

**Faculty In charge:**Mrs.G.R.Hemalakshmi, (Asst prof/CSE)

**Faculty Members:** Ms. G. SivakamaSundari (Asst. Prof. /CSE),  
Ms.R.Sowndarya(Asst. Prof. /CSE),  
Ms.K.Ramalakshmi(Asst. Prof. /CSE),  
Ms.K.ArunSelvi(Asst. Prof. /CSE),  
Ms.A.Sathiya(Asst. Prof. /CSE)

**Major Goal (Not more than 200 words):**

To motivate the research skill among the faculty members and to upgrade the students knowledge in the machine learning field and to encourage them to publish paper in this field by conducting student

development programme during the odd Saturday. And to encourage the students to come up with the new project related ideas along with good paper publication.

**Vision:** To publish atleast three journal papers in the reputed journal and two project proposal in our area of expertise.

**Mission:** To achieve vision, we have a plan to discuss about our area with other faculty members during evening time. And we have a plan to attend one FDP /workshop related to our field.

**Activities planned for the academic Year 2018-19:**

- Planned to conduct Student Development programme during odd Saturday
- Planned to invite one resource person for enriching the students knowledge in the machine learning field
- Atleast three journal paper publication by the faculty and also by the student.
- Planned to attend one FDP/Worshop per semester

**Acheivement Staus(June'18-May'19):**

Focus Group activities Conducted: Nil

Details of Event Participations: Nil

List of Publications(Faculty/Scholar/Students): Nil

Particulars of MoU/Consultancy/Patents/etc: Nil

Details of Seminar Grants: Nil

Funded Student Projects: Nil

National/ International achievements: Nil

**Title of the Focus Group: Systems**

**Faculty In charge:** Dr.S.Maheswari

**Faculty Members:**

Ms.S.Kalaiselvi

Mr.A. Shenbagaraman

Mr.S.Rajeshkumar

**Major Goal (Not more than 200 words):**

To motivate the faculty members and students in the area of systems field and to encourage them to apply the project proposal, paper publication, apply the seminar grand and attend the faculty development programme, Industry know-how programme during the academic year 2018-2019. And to encourage the students to come up with the new project related ideas along with good paper publication.

**Vision:** To publish atleast two journal papers in the reputed journal, one project proposal, one seminar grand in the area of systems.

**Mission:** To achieve vision, following activities are discussed with team members during evening time. To collaborate with industries and government organizations through industry training programme and apply the project proposal

**Activities planned for the academic Year 2018-19:**

- Planned to send one seminar or workshop proposal to DST funding agency.
- planned to send one research project proposal to UGC agency
- Planned to invite one resource person for enriching the students knowledge in the systems field
- Plan to publish two papers in Scopus journal
- Planned to attend one FDP/Workshop per semester
- All the faculty members have a plan to register atleast one NPTEL course related to our focus group

**Achievement Status (June'18-May'19):**

**Focus Group activities Conducted:** Nil

**Details of Event Participations:** Attended the Industrial Know-How Programme

Name of the Faculty	Date / Period	Company Name	Programme details
Dr.S.Maheswari	11.06.2018 to 16.06.2018.	BIZPLUS TECH SERVICES PRIVATE LIMITED, CHENNAI-600042	Industrial Know-How Programme

**List of Publications (Faculty/Scholar/Students):** The paper has been communicated to Inderscience publisher by Dr.S.Maheswari and Ms.S.Sowndarya

**Particulars of MoU/Consultancy/Patents/etc:** Nil

**Details of Seminar Grants:** Work in progress

**Funded Student Projects:** Nil

**National/ International achievements:** Nil