

NSF Research Experiences for
Undergraduates Site:
Smart Energy and
Smart Systems



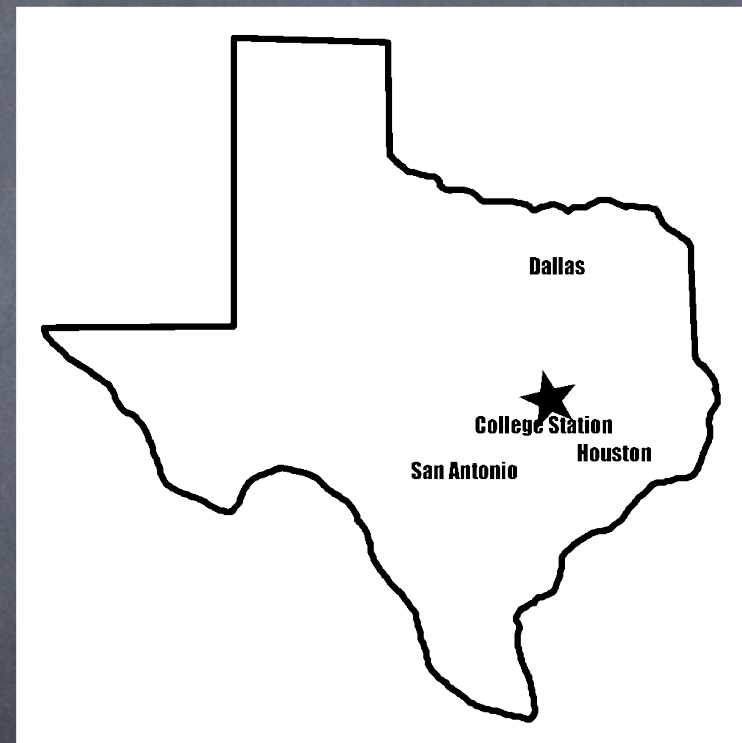
Dr. Deepa Kundur

Associate Professor
Department of Electrical & Computer Engineering
Texas A&M University

Texas A&M University

www.tamu.edu

- nearly 49,000 students overall
- approx. 10,700 engineering students (7,800 undergraduates)
- approx. 750 undergraduate ECE students



Engineering Disciplines

- Aerospace Engr.
- Agricultural Engr.
- Biomedical Engr.
- Chemical Engineering
- Civil Engr.
- Computer Engr.
- Computer Science & Engr.
- Electrical & Computer Engr.
- Health Physics
- Industrial Engr.
- Industrial Distribution
- Materials Science & Engr.
- Mechanical Engr.
- Nuclear Engr.
- Oceanographic Engr.
- Petroleum Engr.

Undergraduate Summer Research Programs



NSF RESEARCH
EXPERIENCES FOR
UNDERGRADUATES (**REU**)

COE UNDERGRADUATE
SUMMER RESEARCH
GRANTS PROGRAM (**USRG**)



NSF REU Program



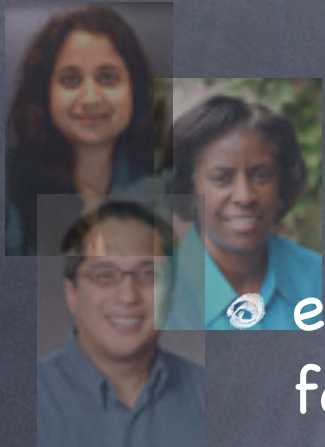
National Science Foundation (NSF) provides stipend and living expenses for students

- full-time 10-week programs of study during summer semester
- focuses on smart energy and smart systems
 - develop next generation algorithms, protocols and prototype technologies by advancing signal processing, computation, microelectronics and nanoscale device synthesis.

**ELECTRICAL &
COMPUTER
ENGINEERING**



NSF REU Program



- electrical & computer engineering (ECE) faculty serve as mentors
- work closely with faculty and graduate students on current research projects
- make contributions to ongoing faculty research and gain appreciation for a career in research
- exposed to lab and facility tours, ethics seminars, GRE review sessions, graduate school seminars



NSF REU Program

Deliverables:

- research plan
- poster presentation at research symposium
- additional tasks set by faculty mentor
- success measured in terms of percentage of students pursuing graduate studies upon graduation

Mentor-Mentee Matches



Dr. Robert Balog

Jasmine Leon

Stephen
McConnell



Drs. D. Kundur &
K. Butler-Purry

Coreth
Borneman

Monica Duran



Dr. Jose Silva-
Martinez

Jarrett David

Omar Masud



Dr. Haiyan Wang

Imen Ben-
Neticha

Patrick Smith



Dr. Le Xie

Brook Feyissa

Wembley Leach

Ethics Seminars



Dr. Takis Zourntos

Jasmine Leon

Stephen
McConnell

Coreth
Borneman

Monica Duran

Jarrett David

Omar Masud

Imen Ben-
Neticha

Patrick Smith

Brook Feyissa

Wembley Leach

Student Responsibilities

- TAMU ECE NSF REU Calendar: <http://www.ece.tamu.edu/~reu/calendar.html>
- Attend all seminars and faculty tours for ECE REU program
- Attend USRG seminars and luncheons on the ECE REU calendar
- Attend GRE review sessions
- Attend any compus wide activity on the ECE REU calendar

Student Responsibilities

- Do NSF Responsible & Ethical Conduct in Research Requirement; DEADLINE: Friday, June 3, 2011, 5 pm.
- Complete Reimbursement Documents; DEADLINE: Friday, June 3, 2011, 5 pm.
- Conduct Pre-program Evaluation; DEADLINE: beginning of REU program (see email).
- Conduct End of Program Evaluation; DEADLINE: toward end of REU program (see email).

Student Responsibilities

- Work at least 40 hours/week on research
- Submit research plan form (Deadline: Friday, June 3, 2011, 5 pm); DEADLINE: Thursday, June 9, 2011, 5 pm.
- Create and present poster for research symposium; DEADLINE: Friday, August 5, 2011, 8 am.
- Submit an electronic version of your poster on CD to Dr. Kundur; DEADLINE: Friday, August 5, 2011, noon.

Stipends

- Total stipend of \$4,100 plus \$1000 meal allowance; paid through financial aid as scholarships
- Divided into three fairly equal installments around:
 - June 3, 2011
 - July 1, 2011
 - August 1, 2011

NSF Responsible & Ethical Conduct in Research Requirement

- Go to <http://www.citiprogram.org>
 - create an account
 - do training
 - print **completion report** and return to Dr. Kundur's 237D WERC mailbox or to her assistant Ms. Gayle Traivs in 241A WERC
 - **DEADLINE: Friday, June 3, 2011, 5 pm**

Computer Accounts and Student IDs

- Obtain NetID and password at: <http://gateway.tamu.edu>
- Student IDs enable you to use TAMU facilities
 - pick up at the Student Business Services Office located at the General Service Complex

Other Resources

- Printing facilities (Departmental 500 page limit)
- <http://howdy.tamu.edu> to access student records
- Evans library and <http://library.tamu.edu>
- Recreation Center, intramural summer sport team
- Parking permits



TAMU
ECE

NSF
REU

Dr. Deepa Kundur
dkundur@tamu.edu

<http://www.ece.tamu.edu/~deepa/>

QUESTIONS?
COMMENTS?
SUGGESTIONS?