



BITS & PCs

COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

May 2003

Wright State University Dayton, Ohio 45435

Vol. 19 No. 7

Important Dates

- May 26
UNIVERSITY CLOSED -
Memorial Day
- May 27
Last day to apply for August
graduation
- May 30
- Last day to register for
the Order of the
Engineer Ceremony
 - Last day to RSVP for
CECS Awards Ceremony
- June 7
Last day of spring quarter
classes
- June 9-13
Final Exam Week
- June 13
- 4:30 p.m. - CECS Awards
Ceremony
 - 7:00 p.m. - Order of the
Engineer Ring Ceremony
- June 14
Spring Quarter Commence-
ment
- June 16
First day of "A" and "C" term
summer quarter classes
- July 4
UNIVERSITY CLOSED -
Independence Day
- July 17
Last day of "A" term classes
- July 21
First day of "B" term
summer quarter classes
- August 21
- Last day of "B" and "C"
term classes
 - Last day to apply for
December graduation

Beck Receives Honorary Doctorate



Clark E. Beck, P.E., has recently been awarded an Honorary Doctorate from the University of Cincinnati in recognition of his contribution to the University of Cincinnati, the engineering profession, the academy of scholars and teachers and to the good of society.

Beck holds degrees in mathematics, mechanical engineering and an advanced degree in aerospace engineering. He is involved with numerous organizations in the community such as: the American Society of Mechanical Engineers, the Society of Technical Communication and the National Society of Black Engineers. He is also a member of the Human Services Levy Review Board, the Dayton Mediation Center Board, Montgomery County Plan Board, Harrison Township Board of

Zoning Appeals and Counselor for the Ohio Senior Hospital Insurance Information Program. Beck also currently holds positions as the Chair of the Dayton Water and Sewer Board of Appeals, Secretary of the Dayton Chapter of the American Red Cross, Treasurer of the Montgomery County Fair Housing Board, Secretary of the Order of the Engineer, and Trustee of the University of Cincinnati Foundation.

His educational involvement includes 21 years of teaching at the college level at Sinclair Community College, Central State University, and Wright State University. While at WSU, he created and implemented the Wright STEPP (Science, Technology, and Engineering Preparatory Program), which was selected by former president George Bush as the 384th daily point of light in 1991. He also received the Wright State University Presidential Award for Community Service while a full-time assistant dean.

ME Student Receives National ROTC Award

Josh Szarek, a WSU mechanical engineering student and Army ROTC cadet, was recently selected to attend the George C. Marshall ROTC Award Seminar.

The General Marshall Foundation began this program to honor members of the ROTC who have met the high standards that General Marshall ascribed to the Reserve Officers' Training Corps. Candidates for the Marshall award are evaluated on their overall contributions to both their school and their ROTC program.

The award was given to Szarek at a seminar in Lexington, VA where he participated in roundtable discussions on national security and the role of the non-commissioned officer. "Winning this award is in credit to the excellent leadership training I've received from the outstanding officers and non-commissioned officers at Wright State University's AROTC department and the entire cadet Raider Battalion," said Szarek.

Congratulations!!

Visit us on the Web at <http://www.engineering.wright.edu>



Winter 2003 Dean's List



BIOMEDICAL ENGINEERING

Austin M Balogh High Honors
 Kelly C Barrett Honors
 Chet T Closson Highest Honors
 Marie E Craig Honors
 Sherita I Eberhardt Honors
 Emily S Ervin Honors
 Christine M Esperanza Highest Honors
 Justin R Estep Highest Honors
 Allison D Gadd Highest Honors
 Hilary L Gallagher Honors
 Jennifer L Garber Honors
 Amanda L Hanes Honors
 Michael W Kahelin Highest Honors
 Maria J Kahle Highest Honors
 Carmelo J Lamancusa Highest Honors
 Andrew M Maley Highest Honors
 Faridal Mutalib High Honors
 Muhammad M Qureshi Honors
 Grant C Roush High Honors
 Anthony L Sabatini Highest Honors
 Megan M Stoudinger High Honors
 Erin M Tewksbury Highest Honors
 Michael R Varney Honors
 Catherine E Zelnio Highest Honors

COMPUTER ENGINEERING

Derrick T Bauer High Honors
 Jason A Boudi Honors
 Gregory M Burnett Honors
 Peter E Buxa Highest Honors
 Andrew L Dittes Honors
 Kenneth L Eber Highest Honors
 Chad N Erisman High Honors
 Adam B Ewing Honors
 Thomas J Fordon Highest Honors
 Matthew R Gerald Highest Honors
 Peter J Gibbs Honors
 Joan A Henley Honors
 Charles W Hoskins High Honors
 Joseph F Juhasz Honors
 Jordan L King Honors
 Hardik H Lagad High Honors
 Toni N Larson High Honors
 Luke D Mckellar Highest Honors
 Linda J Moore Highest Honors
 Ghesu Y Ndefru Highest Honors
 Ankit A Patel Highest Honors
 Kenneth R Selz Honors
 Alexey Semjonovs High Honors
 Pride K Starnes Honors
 Samuel J Stone High Honors

COMPUTER SCIENCE

James E Antisdell Highest Honors
 Nathaniel R Ayres High Honors
 David E Best Highest Honors
 Robert D Bever Highest Honors
 Craig T Birkemeier Highest Honors
 Jeffrey B Bissantz Highest Honors
 Russell J Block Highest Honors
 Stephen R Bodey Honors
 Thomas R Boehnlein Highest Honors
 David L Boles Highest Honors
 Dustin M Deweese Honors
 Ryan T Flynn High Honors
 Peter C Holm Honors

Charles A Johnson High Honors
 Nicholas Kitchen Highest Honors
 Noah F Niekamp High Honors
 Chintan S Patel High Honors
 Thomas C Patterson Honors
 Dasha Semenova High Honors
 Stuart M Sergeant Highest Honors
 Adam T Sorna High Honors
 Adam J Timmerman High Honors
 Christopher R Ward High Honors
 Jeremy A Warren High Honors
 Charles M Wilt High Honors
 Anderson J Wood Highest Honors

ELECTRICAL ENGINEERING

Brent A Alting Highest Honors
 Michael C Anderson High Honors
 Marcos E Aranha High Honors
 David A Blubaugh Honors
 Zachary J Boes High Honors
 Dave M Brown Highest Honors
 Clifton J Bullmaster Highest Honors
 Matthew J Casto Highest Honors
 Ben N Douglass High Honors
 Daniel L Featherstone Highest Honors
 Henry K Griffith Highest Honors
 Anthony J Halley Highest Honors
 Wen J Han Highest Honors
 Edward E Huling High Honors
 Christopher S Kimmet Highest Honors
 Andrew S Kondrath Highest Honors
 Carrie A Lawson Highest Honors
 Benjamin P Mcclurg Honors
 Paul W Mcdowell Highest Honors
 Ryan E Mcginnis Highest Honors
 Brian M Ore Highest Honors
 Jason A Sawdy Honors
 Daniel A Wells High Honors
 Victor Zamora High Honors

ENGINEERING PHYSICS

Dean P Brown Highest Honors
 Brian J Butts Honors
 Weston R Earick Honors
 Jeff R Gastineau High Honors
 Douglas J Glass Highest Honors
 Daniel A Lemaster Highest Honors

INDUSTRIAL AND SYSTEMS ENGINEERING

Janet K Bensman High Honors
 Bianca J Brown Highest Honors
 Ben J Gerlach High Honors
 Renecia J Joseph High Honors
 Kelly A Loughlin Honors
 Alan G Moore Highest Honors
 Joseph L Nagy Honors
 Joel A Ogden High Honors
 Andrea M Thompson High Honors
 Jeanica N Williams Highest Honors

MATERIALS SCIENCE AND ENGINEERING

Mark D Benedict High Honors
 Joshua P James High Honors
 Joseph W Kell Highest Honors
 James J Ryan Honors

MECHANICAL ENGINEERING

Jerad S Ames Honors
 Mark C Arlinghaus Highest Honors
 Carl J Atzbach Honors
 Craig M Baudendistel Highest Honors
 Andrew P Brackman Highest Honors
 Paul E Brown Honors
 Joshua A Burger Highest Honors
 Chad A Clark Highest Honors
 Michael W Corbett Highest Honors
 Jonathan A Coyle High Honors
 Jerriann M Doll High Honors
 Levi J Elston High Honors
 Kelly R Feirstine High Honors
 Andrew J Fleming Highest Honors
 Joseph E Fuhr Highest Honors
 Justin N Gastrich High Honors
 Wilford H Googe Honors
 Brendhan A Goss Highest Honors
 Carlos E Gutierrez High Honors
 Jeff L Hauer High Honors
 John C Holtkamp High Honors
 Joshua S Kossler High Honors
 Jason R Kremer High Honors
 Jeffrey S Laubenthal High Honors
 Jeffrey J Lichty Highest Honors
 Brian M Lovewell Highest Honors
 Scott T Magoteaux Honors
 Travis E Michalak Highest Honors
 David N Neff Highest Honors
 Zachary J Osborn High Honors
 Gregory O Palm Highest Honors
 Aaron C Powell Highest Honors
 Michael C Pulcini Honors
 Rebekah L Puterbaugh High Honors
 Nicholas L Raines Honors
 Aaron L Reinhart High Honors
 Adrienne E Schaab Highest Honors
 Doug F Schroeder Honors
 Kristen M Shiverdecker High Honors
 Jamie P Speck High Honors
 Joshua J Szarek Highest Honors
 Dan A Taphorn High Honors
 Randy J Tobe Highest Honors
 Jeremy P Tumpak Highest Honors
 Justin B Van Horn Honors
 Aric F Wagner Highest Honors
 Lindsay M Walthall High Honors
 Jessica M Williams Highest Honors

PRE-COMPUTER ENGINEERING

Justin G Cheuvront Honors
 Anthony W Edgar Highest Honors
 Daniel M Garling Highest Honors
 Andrew T Severyn Highest Honors
 Daniel J Whitman Highest Honors

PRE-COMPUTER SCIENCE

Joseph G Bouchard III High Honors
 Sam P Canfield High Honors
 Todd M Dornmeyer Highest Honors
 Emily N Ernst Highest Honors
 Nicholas R Foor Highest Honors
 Matthew J Jennings High Honors
 Romeao J Hazen High Honors
 James R Knapp High Honors
 John C Kuli High Honors

Nathan D Roth	High Honors	Taiwo A Ogunjobi	Honors	Matthew J Mangen	Honors
Benjamin E Sutcliffe	Highest Honors			Shannon A Mayne	Honors
Jeffrey R Taylor	High Honors	UNIVERSITY COLLEGE		Cherese M Mcbeath	High Honors
Seth T Wilhelm	Highest Honors			Matthew W Middendorf	Honors
PRE-ELECTRICAL ENGINEERING		Omar Abousoud	Highest Honors	Robert T Molnar	Highest Honors
Natalia G Bartholomew	High Honors	Vince M Baldasare	High Honors	Vestine Mukanshimiye	Highest Honors
Jason M Blackaby	Highest Honors	Cecilia C Black	High Honors	Joshua A Myers	Honors
Tony M Ling	Highest Honors	Andrea J Bolds	Honors	Brian D Nicholson	Highest Honors
Thomas C Pestak	Highest Honors	Jack L Burke	Honors	Stephen M Nutbrown	Honors
Christopher R Plotts	High Honors	Jesse R Corns	Highest Honors	Amrita R Patel	Highest Honors
Sean R Stevens	Highest Honors	Daniel M Dafler	High Honors	Lalu J Patel	Highest Honors
Brian J Wirick	Highest Honors	Gary M Dexter	Honors	Abbey M Puterbaugh	Honors
Brian C Worley	Honors	Brandon J Ellis	Highest Honors	Nathan E Queen	Honors
		Pooia Fattahi	Highest Honors	Simarpreet S Rattan	High Honors
		Orelle R Fogle	Highest Honors	Joshua J Reed	Honors
		Edward T Gemin	Honors	Mark B Scott	Highest Honors
PRE-ENGINEERING PHYSICS		Timothy D Gibson	Honors	Shaishav K Shah	Honors
Nick A Chenoweth	Honors	Tiffany M Hall	Highest Honors	Piyush V Sharma	Honors
David K Fultz	High Honors	Matthew S Hammond	High Honors	John R Stafford	Honors
Charles D Phelps	Highest Honors	George E Harlan	Highest Honors	Scott A Stanfield	High Honors
		David T Hartman	Highest Honors	Brian A Van Dyke	Honors
PRE-MECHANICAL ENGINEERING		Daylond J Hooper	High Honors	Chris W Wagner	High Honors
Bradley N Hammond	Honors	Gwendolyn J James	High Honors	Ronald D White	Honors
Justin D Ling	Honors	Grant S Kelly	High Honors	William B Witters	High Honors
		Brandon C Kirby	Highest Honors		
		Erin M Linaberry	Highest Honors		

College of Engineering and Computer Science

Annual Recognition and Awards Ceremony

Friday, June 13, 2003

4:30 PM

Student Union Multipurpose Room

Join us as we honor outstanding students, faculty, and friends.

Reception immediately following the ceremony.

Don't forget to RSVP by **May 30th** to (937) 775-5001 or email jgarring@cs.wright.edu.

Order of the Engineer Ring Ceremony



The Order of the Engineer (OOE) was established to promote professionalism among engineers and graduates of accredited engineering programs. The College of Engineering and Computer Science holds two induction ceremonies each year, one at the end of fall quarter and one at the end of spring quarter.

The next induction ceremony will be held on Friday, June 13, 2003 at 7:00 PM in the Student Union Multipurpose Room. Engineering seniors graduating in June 2003 or August 2003, graduate students, alumni, and faculty are encouraged to register and participate.

The \$10 registration fee covers membership and the steel ring. Registration and fees must be received by the Office of Conference and Events **no later than May 30th**.

For a registration form or more information about OOE or the ring ceremony, visit the "What's New" link on the College homepage at www.cs.wright.edu or contact the Dean's Office at (937) 775-5001.

BITs & PCs

College of Engineering and Computer Science
Wright State University



Dean

James E. Brandeberry, Ph.D., P.E.

Editor

Jenny Garringer

BITs & PCs is a monthly newsletter published by the College of Engineering and Computer Science to inform students about activities, news, opportunities and changes occurring in the College. It reports on the achievements of faculty and students; changes in organization, policy and curriculum; scholarship and employment opportunities; and engineering and computer science student club activities.

The current issue of *BITs & PCs* is available on the Web at <http://www.cs.wright.edu/bitsandpcs/>. Copies are also available in the College office, any Department office, literature racks in the Russ Center Atrium, Russ Center Study Lounge, or the Student Club Room.

The next issue of *BITs & PCs* will be published the week of June 2, 2003. To submit items for this issue, call the College of Engineering and Computer Science at (937) 775-5001, or send e-mail to jgarring@cs.wright.edu by May 19, 2003. The College of Engineering and Computer Science reserves the right to edit all material for publication.

SCHOLARSHIPS AND FELLOWSHIPS

The **American Public Power Association (APPA)** awards scholarships each year of its DEED (Demonstration of Energy-Efficient Developments) Program. APPA will award one \$5,000 Technical Design Project each year intended to promote the involvement of students studying energy related disciplines and geared towards engineering students. Deadline is October 15, 2003. For more information and an application visit DEED's website at www.APPAnet.org, and select DEED from the menu bar. You may also call or email Bethany Luna at (202) 467-2993 or send an e-mail to DEED@APPAnet.org.

The **Greater Dayton IT Alliance** is accepting applications for the Robert V. McKenna Scholarship (\$3,500) and the IT Alliance Internship Scholarship (\$1,500).

Robert V. McKenna Scholarship
You must be in an IT/MIS related major. All students selected to receive the scholarships shall have demonstrated high characters and values. Students selected should desire to remain in the Ohio area after completing their course of study. Students attending any college/ university, in the Southwest Ohio area shall be eligible. Student financial need shall be an important selection criteria.

IT Alliance Internship Scholarship
Student eligibility for this award is that you have worked as an intern or co-op within a Greater Dayton IT Alliance member company. You may qualify if you have worked in an IT-related internship/ co-op position anytime from June, 2001 to the present. Must have a minimum completion of year's worth of college credits. You cannot have a graduation

date before August, 2003.

Deadline for applications is May 16, 2003. For more information visit the Greater Dayton IT Alliance website at www.daytonitalliance.org or contact Trisha West at 229-0054 x10. Applications are available in 405 Russ.

ITS Mid-America is offering two \$1,000 scholarships to students interested in high tech urban transportation mobility programs such as Intelligent Transportation Systems and Smart Cars or Smart Highways. Applications need to be received no later than June 30, 2003. Along with the application, students need to submit a 2-page written paper describing the candidate's achievements and how his/her work will benefit ITS. Also, a letter of recommendation by a professor employed by the university or by an employer where the applicant has made a significant ITS contribution recommending the candidate for receipt of the ITS Mid-America scholarship award. For more information, contact the Mid-Ohio Regional Planning Commission at (614) 233-4150.

The **Ohio Society of Professional Engineers and the Engineers Foundation of Ohio** are offering a \$10,000 Engineers Foundation of Ohio Steinman Fellowship to a senior undergraduate engineering student who is planning on attending a graduate ABET accredited engineering program. The purpose of the fellowship is to assist young engineers in their pursuit of a graduate degree in engineering. The deadline for submissions in May 16, 2003. For more information visit www.ohioengineer.com or e-mail

the organization at ospe@iwaynet.net.

The **U.S. Air Force Bioenvironmental Engineering Scholarship Program** is offering full-tuition scholarships for seniors and graduates students within one year of graduation. The Air Force will also reimburse for textbooks and other supplies as well as supply the recipients with a monthly stipend of over \$1,100. Recipients are guaranteed employment for three years as a Bioenvironmental Engineer after graduation. U.S. citizenship is required.

For more information, contact:

MSgt Doug Fields
2940 Presidential Drive, Suite 160
Fairborn, OH 45324-6210
E-mail: douglas.fields@rs.af.mil

The **U.S. Department of Homeland Security** is currently taking applications for undergraduate scholarships and graduate fellowships. These opportunities are offered to students who are interested in pursuing the science and technology necessary to protect the nation against further terrorist attacks and protect the rights of American citizens. Areas of study include: physical, biological, social and behavioral sciences, engineering, mathematics, and computer science. U.S. citizenship is required to apply. Students interested in the undergraduate scholarship need to be of junior or senior standing. The graduate fellowship is offered to students beginning their first-year of their graduate studies. Tuition plus a stipend are available, but is highly competitive with other national programs. For more information visit their website at www.orau.gov/dhsed.

The **SOCHE Student Research Program** has several positions for undergraduate and graduate students available in the Materials Lab at Wright-Patterson Air Force Base. They offer flexible work schedules, career-related work experience in their state-of-the-art labs, and competitive wages while you learn (Sophomore: \$11.25/hr, Junior: \$12.65/hr, Senior: \$14.00/hr, Graduate: \$17.20/hr, Ph.D.: \$20.80/hr). Applicants must be degree seeking students in good standing with U.S. citizenship. No experience is necessary. Interested students can get an application via the SOCHE website at:

www.soche.org

Applications must be submitted with a résumé and transcript. For more information, call the SOCHE office at (937)258-8894.

The following positions are currently available at SOCHE:

Project No. 3.1 - Aircraft Coatings

Majors - Mechanical Engineering, Materials Science, Chemical Engineering

Description: The work required in this Project involves hands-on, in-house research on synthetic organic coatings. This includes the synthesis of oligomeric compositions which are water soluble to promote enhanced processing. Characterization of the materials would include IR & UV spectroscopic methods and viscosity determinations. The work also includes general lab upkeep, like cleaning glassware and stocking supplies.

Project No. 10.1 - Recrystallization Behavior of Waspaloy

Majors - Mechanical Engineering, Materials Science, Chemical Engineering

Description: Isothermal hot-working experiments will be conducted on cast-and-homogenized double-cone and cylindrical samples of Waspaloy. Following deformation, optical metallography and orientation imaging microscopy will be conducted to determine the extent of dynamic and/or static recrystallization and the orientation dependence of recrystallization. The results will be utilized to develop phenomenological and mechanistic models of recrystallization kinetics and the physical processes which underlie nucleation and growth of recrystallized grains. The models will be compared to previous results for wrought billet Waspaloy.

Project No. 29.1 - Polymeric Materials

Majors - Chemistry

Description: The work required in this Project involves hands-on, in-house research on synthetic organic polymers. This includes the synthesis of monomer precursors, monomers, model compounds and polymers. Evaluation techniques of the characterization of the materials will include IR, UV, and viscosity determinations.

Project No. 31.1 - Adhesive Bonding/Composite Materials Engineering and Analysis

Majors - Mechanical Engineering, Materials Science, Chemical Engineering

Description: Fabricate adhesive test specimens:

prepare and process adhesive bonds: test and evaluate quality of bonded repairs. Fabricate, test, and evaluate advanced composite materials.

Project No. 37 - Atomistic and Continuum Modeling of Quantum Dot Structures

Majors - Physics, Electrical Engineering, Materials Science, Computer Science

Description: Perform finite element calculations to determine the minimum energy shape of quantum dots as a function of dot volume, using commercially available finite element software. Repeat these calculations at the atomic level by performing molecular dynamics calculation using a valence force field (VFF) potential. Develop this molecular dynamics code in MATLAB.

Project No. AFIT 40.1 - AFIT Low Speed Wind Tunnel Control and Flow Verification

Majors - Mechanical Engineering, Materials Science, Chemical Engineering

Description - Control software for the Aeronautics and Astronautics low speed wind tunnel will be developed to computer control the tunnels wind speed, and position the sting balance at desired locations. Data acquisition software will also be developed to acquire balance data, which will include calibration algorithms on the six degrees of freedom balance. A final check out will be performed for wind tunnel mean air speed and wind tunnel turbulence levels. National Instruments lab view will be the software.

Project No. 45 - Surface Analytical Studies of Aircraft Coatings

Majors - Chemical Engineering, Materials Science

Description: The work involves hands-on, in-house research of metallic corrosion phenomenon and new coating materials. The new materials to be investigated included substrates sol-gel based surface treatments, hybrid sol-gel based thermal control coatings, and a variety of organic paint systems. The work includes surface chemical analyses (XPS, AES) of coating materials, analysis of the effects of various treatments on aluminum alloys, a variety of analytical studies directed to elucidate corrosion protection mechanisms, and chemical analysis (FTIR, Raman, ESR, etc.). These surface studies include chemical analysis of alloy surfaces, analysis of chemistry, and investigation of corrosion inhibitor mechanisms, all aimed at development of high performance corrosion protection systems.

Project No. 49.1 - Development of High Performance Aerospace Coatings

Majors - Chemistry

Description: Formulation and characterization of novel polymers and coatings, spectroscopic investigation of coatings and coating formation processes, and the determination of basic properties such as Tg. The work may also include other evaluations, e.g. electrochemical and chemical analysis (EIS, SVET, FTIR, Raman, ESR, etc.), surface chemical analysis of coating materials, analysis of the effects of various treatments on aluminum alloys, and a variety of analytical studies directed to elucidate corrosion protection mechanisms.

Faculty Facts

Grandhi, Ramana (ME)

Nonlinear Analysis of Advanced Composites in a Thermal/Acoustic Environment
Anteon Corporation
7/17/02-1/10/04.....\$148,281

Hangartner, Thomas (BIE)

Postmenopausal Evaluation and Risk Reduction
Pfizer, Inc.
1/1/02-12/31/04.....\$1,773

Hong, Lang (EE)

Terrain/Feature Aided Tracking and Finger-Printing
Anteon Corporation
3/1/03-6/30/03.....\$30,000

Hong, Lang (EE)

Multirate Interacting Multiple Model Fusion
MRLets Technologies, Inc.
7/1/02-6/30/04.....\$35,000

Mukhopadhyay, Sharmila (ME)

High Pressure Plasma Processes
Procter & Gamble Company
2/15/01-9/1/03.....\$33,416

Narayanan, Sundaram (BIE)

Perform Scalability Analysis
Lexis-Nexis
3/1/03-12/31/03.....\$25,608

Rizki, Mateen (CSE)

Hybrid Evolutionary Learning for Pattern Recognition Contract (HELPR) to Three-Dimensional Target Classification
Department of Defense, Air Force, Air Force Research Laboratory
10/1/02-9/30/04.....\$98,000

Shang, Joseph (ME)

Investigation of Microwave Attenuation in Plasma
Department of Defense, Air Force Office of Scientific Research
1/1/03-12/31/03.....\$12,000

Srinivasan, Raghavan (ME)

Continuous Sever Plastic Deformation Processing of Aluminum Alloys
U.S. Department of Energy
2/21/01-2/20/04.....\$215,000

Thomas, Scott (ME)

Aircraft Mechanical/Thermal Technology Research
Department of Defense, Air Force, Air Force Research Laboratory
8/21/98-12/20/03.....\$5,000

Wolff, Mitch (ME)

Menart, James (ME)
Computational Aerothermodynamics
Department of Defense, Air Force, Air Force Research Laboratory
9/30/02-9/29/07.....\$50,000

Attention Faculty and Professionals

The Fulbright Scholar Program is offering awards in 140 countries for college and university faculty and administrators as well as professionals from the business community and government, artists, journalists, lawyers, independent scholars and many others.

Traditional Fulbright awards vary from two months to an academic year or longer. A new short-term grants program — The Fulbright Senior Specialists program— offers two- to six-week grants in a variety of disciplines and fields.

Awards descriptions and application materials can be found on the CIES website at: www.cies.org or contact by email at apprequest@cies.iie.org. Applications deadlines for the 2004-2005 awards are:

- ◇ **August 1** for Fulbright traditional lecturing and research grants worldwide
- ◇ **November 1** for the summer German Studies Seminar and for spring/summer seminars in Germany, Korea and Japan for academic and international education administrators
- ◇ Fulbright Senior Specialists Program – **rolling deadline**

Collegiate Inventors Competition

The United States Patent and Trademark Office, along with the National Inventors Hall of Fame, are sponsoring this year's Collegiate Inventors Competition. The competition recognizes and rewards innovations, discoveries and research by college students and their faculty advisors.

New Undergraduate Category

The competition is offered to both undergraduate and graduate students interested. The newly added undergraduate category will allow students an even greater chance of being recognized for their work.

Bigger Cash Prizes

Cash prizes are awarded throughout the competition totaling over \$160,000. The grand prize winner – whether it's an individual student or a student team – is now eligible to receive a \$50,000 cash prize, while the winner's advisor receives \$10,000. There are also two \$25,000 Graduate prizes and two \$15,000 Undergraduate prizes.

The deadline for the competition is June 1, 2003. For full information and applications visit: www.invent.org/collegiate

New Computer Science Courses

The Department of Computer Science and Engineering would like to announce a new course:

CS 790

Introduction to Parallel Algorithms

Low-cost parallel computers such as PC clusters are becoming available, and many previously unsolvable problems can be solved using such computers. However, designing algorithms that perform well on parallel computers is often challenging.

The focus of this course is on learning how to design algorithms for parallel computers and how to evaluate them. Topics covered in the class include models of parallel computers, matrix algorithms, sorting, search algorithms and typical applications. 3 hours lecture, 2 hours lab.

Prerequisite: CS 400(data structures and software design)

For more information, contact:

Dr. Natsuhiko Futamura
335 Russ
(937) 775-5107
nfutamur@cs.wright.edu

The Department of Computer Science and Engineering would like to announce a new course for fall quarter 2003:

CS 499/699

Introduction of Data Mining

Data mining is concerned with the extraction of novel knowledge from large amounts of data. This course introduces the concepts, issues, tasks and techniques of data mining. Topics include data preparation and feature selection, high-level statistical analysis, associations, classification, clustering, interestingness analysis, cross validation, scalability, and typical applications.

3 hours lecture, 2 hours lab.

Prerequisite: CS 400 (data structures and software design) and CS 405 (database management systems).

For more information, contact:

Dr. Guozhu Dong
430 Russ
(937) 775-5066
gdong@cs.wright.edu

Get a Free Graduate Education at AFIT

The Air Force can send you to graduate school as your regular job and pay for it.

To begin, apply for the Officer Training School (OTS). This fast-paced school is located at Maxwell Air Force Base in Alabama. If you are selected, you will be challenged at every turn. Your studies will include classes in professional knowledge, leadership and management, defense studies, and communication skills. You will take part in organized sports and physical conditioning to develop your confidence and teamwork abilities.

To be eligible for OTS you must be a U.S. citizen, 18-34 years of age, and meet certain physical requirements. You must have excellent moral character and score competitively on the Air Force Officer Qualifying test. In addition, you must be a graduate of an accredited college or university. You may apply for OTS if you are within 365 days of graduation.

For more information, contact:

Douglas Fields
Officer Accessions
2940 Presidential Drive, Suite 160
Fairborn, OH 45324
(937) 427-3158
E-mail: douglas.fields@rs.af.mil

AFIT offers MS degrees in the following areas:

- Acquisition management
- Engineering physics*
- Aeronautical engineering*
- Information resource management
- Applied mathematics*
- Logistics management
- Applied physics*
- Materials science and engineering*
- Astronautical engineering*
- Meteorology
- Computer engineering*
- Nuclear engineering*
- Computer systems*
- Operational analysis
- Electrical engineering*
- Operations research*
- Electro-optics*
- Systems engineering*
- Engineering and environmental management
- Space operations

* AFIT offers the doctor of philosophy degree in this area

AFIT is just one of the several competitive educational programs the Air Force has to offer.

A
i
r

F
o
r

c
e



Office of the Dean

College of Engineering and Computer Science
3640 Colonel Glenn Hwy.
Dayton, OH 45435-0001

