OAKLAND UNIVERSITY

COMMENCEMENT

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

The motto of Oakland University, *"Seguir Virtute E Canoscenza,"* which is incorporated in its seal, has a distinguished origin, Canto XXVI, l. 120, of Dante's *Inferno.*

These are the final words of Ulysses' great speech to his men urging them to sail on and on in pursuit of knowledge and experience of the world—even beyond the pillars of Hercules, traditionally the frontier and limit of legitimate exploration.

This is the three-line stanza:

Considerate la vostra semenza
Fatti non foste a viver come bruti
Ma per seguir virtute e canoscenza

Consider your birth
You were not made to live like brutes
But to follow courage and knowledge

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

June 1, 1996

7:30 p.m.

Howard C. Baldwin Memorial Pavilion

Oakland University

Rochester, Michigan

ORDER OF CEREMONY

Processional
Richard E. Haskell, *Marshal*
Hoda Abdel-Aty-Zohdy, *Deputy Marshal*
David E. Boddy, *Deputy Marshal*

The audience is requested to stand and remain standing during the processional and the recessional.

Welcome
Michael P. Polis
Dean, School of Engineering and Computer Science

Commencement Address
George R. Perry
President and CEO
Siemens Automotive Corporation

Presentation of Honors

Presentation of Special Awards

Awarding of Degrees
Gary D. Russi
Interim President, Oakland University

Presentation of Candidates for the Ph.D. Degree

Presentation of Candidates for the M.S. Degree

Presentation of Candidates for the B.S.E. and B.S. Degrees

Salutation
Donald A. Misson, *Graduating Senior*
Tomohiko Oshio, *Graduating Senior*

Alumni Welcome
James B. Getchell, *B.S. '67*
Reliability Manager for Corvette, General Motors Corporation

Valediction
Gary D. Russi

Recessional
Richard E. Haskell

Reception
The Oakland University Alumni Association cordially invites graduates, guests, and members of the faculty and staff to the reception immediately following the ceremony in the Oakland Tent.

Processional and recessional music by
Andrea and Brian Moon, Trumpet and Keyboard

ON ACADEMIC REGALIA

An edifying note contributed by a certain anonymous doctor of philosophy.

On at least two solemn occasions during the academic calendar—spring and fall commencement—the faculty of the university publicly displays its full academic regalia and partici-ates in the liturgy of processional and recessional, that curious coming and going that symbolizes the ceremony of commencement. The purposes of commencement are well known, but the reasons for the peculiar garb of the celebrants and their odd order of march are often as obscure to the audience as they are, in fact, to the faculty itself. This note may serve to explain academic dress and the professional pecking order it costumes.

Contemporary academics are descendants of clerical schoolmen in the universities of medieval Europe. Like the clergy, members of the bench and bar, and other learned professions, medieval scholars were clothed in heavy robes to stay warm in unheated stone buildings. Like all members of a hierarchical society, the medieval faculties rejoiced in visible insignia of rank. These outward signs of accomplishment and authority were tailored into the robes. Although the need for such voluminous garments to keep the scholar from freezing is long past, the use of them as emblems of dignity remains. You will observe that all caps and gowns worn by our faculty are black, with certain disturbing exceptions. Black was the color adopted by mutual agreement among American universities at the end of the 19th century. In Europe each university has its own distinctive gown, varying in color and cut from all others. A European academic assemblage is a far gaudier occasion than its counterpart in America. Recently, certain universities in this country rashly broke the agreement and authorized robes in their own colors: for example,the crimson of Harvard and the green of Dartmouth may be seen in our ranks. This unsuitable spontaneity has been frowned on by sister institutions, yet the mavericks not only persist in their madness, but gain adherents to their ranks with each passing year.

There are three basic academic degrees: the baccalaureate or bachelor's degree, the master's degree, and the doctorate. A special style of robe is prescribed for each. The bachelor's gown is sparsely cut, neat, but a bit skimpy and unadorned, as befits apprentices. The master's gown is still simple, but fuller, sports a sleeve of extraordinary design impossible to describe, and has a

hood draped from the shoulders down the back. Once used to keep the frost from the tonsured heads of medieval clerks, the hood now is solely a badge of a degree of scholarly achievement. The master's hood is small and narrow, but displays the colors of the institution that awarded the degree. If you knew the colors of American universities, you could easily identify whence came our masters. The doctoral robe is the most handsome of academic raiment. Generous of cut, of fine aristocratic stuff, it is faced with velvet and emblazoned with velvet chevrons on the ample sleeves. You will note that most of the velvet facings and chevrons are black, but that some are of other colors. According to personal taste, the doctor may display the color of his or her doctoral degree on the sleeves and facings: light blue for education, pink for music, apricot for nursing, orange for engineering, and many more. The royal blue of the Doctor of Philosophy (Ph.D.) is the most commonly seen in liberal arts institutions such as Oakland. The doctor's hood is the most elegant of all academic appurtenances. Large and graceful, it is lined in satin with the colors of the university that awarded the degree and is bordered with the color of the degree itself. Most academic costumes include the square cap called a mortarboard; the doctor's tassel may be either black or gold — tassels of all other degrees are black and stringy.

To instructed eyes, the order of march in the processional and recessional reveals the standing of individuals in the institution's formal hierarchy. In the processional the order of entrance into the hall is, quite fittingly, from most junior to most senior. The baccalaureate candidates enter first, followed successively by the masters and doctoral candidates with the whole separated from the faculty by a decent interval. In the faculty order, the instructors precede the assistant professors who in turn are followed by the associate professors. The august full professors bring up the rear. After a respectful distance come the deans who in turn are separated by a significant space from the awful majesty of the platform party, the president, the vice president, and the members of the board of trustees. All remain standing until the board is seated. After the ceremony, the order of recessional is the reverse of the processional. The greatest dignitaries stream out of the hall first, with the artfully organized ranks of priority wallowing in their wake.

It is hoped that these notes may make more intelligible the spectacle you are witnessing today. A discerning intelligence may detect in it many clues to an understanding of the academic profession as it confronts the ambiguities of the future with ancient wisdom and dignified confidence.

DEGREES AWARDED
December 1995

DOCTOR OF PHILOSOPHY

Systems Engineering

Ronald Charles Colgin
Dissertation: *Description and Analysis of A Bayesian Cfar Processor in a Nonhomogeneous Clutter Background*

Ada Chun Dong
Dissertation: *N-Patches Representing Piecewise Polynomials as Linear Combinations of Multivariate B-Splines over Wedged Triangular Domains*

Ahmad Abdel-Fattah Hiasat
Dissertation: *Efficient Arithmetic Algorithms and VLSI Circuit Implementations for Residue Number System Computations*

Donald Gerard Hillebrand
Dissertation: *Determination of the Tribological Effects of Plateauing Machined Surfaces*

ChiaChe Li
Dissertation: *Multiresolution Autoregressive Models for Images Compression and Classification of Planar Shapes*

Kanaparty Narayana Rao
Dissertation: *Application Specific Integrated Circuit (ASCII) Synthesis Using Genetic Algorithm*

MASTER OF SCIENCE

Computer Science and Engineering

Yi-Liang Chen
Jerold James Colwell
Anita C. Houghton
Steven L. Huls
Anuradha Moturi
Fadia Harb Nahed
Todd Christian Rightler
Daniel Lawrence Seeds
Daniel Willard Shelton
Sunitha Subramoniam
Ronald Lee Tholen
Salvatore George Trupiano
Xiaoyi Wu

Electrical and Computer Engineering

Thomas E. Gyoergy
Anthony Dare Hartman
Rita Dawn Hollingsworth
Barbara Ann Oakley
Anne Thumai Thieu

Mechanical Engineering

Michael James Carter
Dan E. Cullen
Larry James DuBay
Arnold P. Goetzke
Rory M. Johnson
James Paul Kulka
Heather A. May
Robert Salvatore Messina
Christopher Charles Miller
Maureen Elizabeth Netherland
Michael L. Olosky
Lawrence William Parets
Brian Charles Pertler
Michael Samuel Weaver

Systems Engineering
Alexander Lowell Dominique
Jon Alan Marble
Paul David Peruski
Michael John Poszywak
Patrick William Schoening
Lydia Sobo
Steven Douglas Stiles

BACHELOR OF SCIENCE

Computer Science
Patricia Noel Fisher
Russell A. Shephard
William F. Stanley

Engineering Chemistry
Michael Richard Mahfet
Michelle Marie Mittler
Terence Francis Riley III

BACHELOR OF SCIENCE IN ENGINEERING

Computer Engineering
Peter Joseph Murasky, Jr.

Electrical Engineering
Ellen Teresa Billo
Thomas John Dolinshek
Scott Edward Fuller
Chad Lee Haase
Mary Ann Katherine Hannish
Bernd Alan Herrmann
Donald Allan Misson
John Schaule
Dewayne Joseph Whitehead

Mechanical Engineering
Gregory Richard Bendzinski
Geoffrey Dale Bouma
Brian John Brown
Jeffrey Scott Czarnik
Denise Maureen Daily
Ronald Mark Durak
Timothy Michael Gavula
Gjelina Gjonaj
Kevin Christopher Harper
John Joseph Headley
Nanette Lynn Hoag
Kevin James Kaplan
Kimberly K. Klaus
Daniel David Kopp
Kevin Clayton Manturuk
Steven Jeffrey Moss
Lisa Marie Olson
Shawn Merie Sanom
John V. Siorek
David Kent Stiles
Brian Robert Swanson
Stacy Fern Turner
Haoyu Xu

CANDIDATES FOR DEGREES
April 1996

DOCTOR OF PHILOSOPHY

Systems Engineering

Christopher Thomas Griffen
Dissertation: *Simultaneous Measurement of Surface Topography and Dynamic Deformation Using Pulsed Speckle Acquisition & Automated Young's Fringe Analysis*

Gopalan Mukundan
Dissertation: *Design of Large Multi-Featured Automobile Exterior Surfaces from Digitized Data with Non-Uniform Interior Curvature Features*

MASTER OF SCIENCE

Computer Science and Engineering

Nishi Ahuja
Satwant Behal
John Martin Dennis
Kaliappan Elangovan
Laura W. Grills
Ajay Girraj Gupta
John Eric Juncker
Geetha Kumaresan
John Matthew Lynden
Ashok Mahadevan
Anthony Louis Mansour
Achla Mishra
Alexander Payne Morgan
Manju Bhashini Mummoorthy
Chander Nijhon
Brian Michael Novak
Ronald J. Potempski
Robert K. Robinson
Shabbeedur R. Shuja
Mohan Dwarakanath Tirumale
Neeta Rajkumar Valera

Electrical and Computer Engineering

David Lawrence Briskey
Sanjiv L. Dungrani
Jeffrey Randall Hemingway
Chad Kaempfer
Mark Anthony Kaganac
Daniel Charles McGarry
Mark Andrew Parsons
Gregory Duane Sabanski
Brian Patrick Scott

Engineering Management

Jeffery James Cornell
Christine Lynn Friedl
John Kipp Hawes III
Brett S. Hinds
Cary Joseph Vernier
Charles S. Voeltzel

Mechanical Engineering

Christine Lynne Barman
Nathan Edward Bloser
Douglas E. Boddy
Eric Lorenzo Burnett
Kenneth James Correia
Doris Va Der
Nicol Margot Erickson
Richard Thomas Fleschner
Mark Kenneth Fosmoen
Cheryl Ann Fry
Kevin C. Gallagher
William J. Hipol
Barinder S. Jawanda
Todd L. Jerry
Douglas W. Killian
Angela Renee Marshall
Michelle Lynn-O'Connor Martindale
Pilaka V. Murty
Douglas Allen Pfau
David Joseph Phillips
Dionne Irene Pineau
Vamsi M. Sistla
Scott Smith
Jason Frederick Thomas

Jill Kristine Thomas
Todd A. Vandall
Jason Michael Wong

Systems Engineering
Ahmed Saber Ahmed
Donald Dwain DeMotte
Max Marcel Dorflinger
David M. Martin
Scott Andrew William Martin
Kenneth Jeffrey McLain
Daniel Arthur Reich
Mark T. Schultz
Luong V. Tieu
Ajay K. Tripathi
Gary Robert VanDekerkhove

BACHELOR OF SCIENCE

Computer Science
Walter Carl Boehrer
Jonathan Daniel Burak
Michael David Gregory
David James Gruber
Lynn Marie Herbert
James S. Hurst
Jack Hagop Mooradian
Steven Paul Smillie
Christopher C. Strauss
David Hansel Turner

Engineering Chemistry
Holly Ann Jones
Jay Michael Tudor

Engineering Physics
Rodney Kenneth Dean

BACHELOR OF SCIENCE IN ENGINEERING

Computer Engineering
Joseph B. DePage
Amro M. Khorshid
Scott David Tudor
Angelina Ventura

Electrical Engineering
Ahmad Al-Hariri
Atheel S. Alkarawi
Gary R. Baranski
Anthony Coelho Carvalho
Daniel John Grimske
Michael D. Iveson
Holly Ann Jones
Joseph George Machak
Edward J. Maurer
Michael Anthony Michon
R. Stephen Plummer
Thomas Patrick Richards
Christopher Scott Tuttle
Angelina Ventura

Mechanical Engineering
Fuat Ismoll Adoglu
Christopher Dewain Allen
James Fredrick Arwady
Raymond Edward Arwady
Gregory James Baron
Joseph Richard Bieniek
Michael John Boesch
Aaron Michael Boyer
Steven A. Bronczyk
Beverly Ann Daniewski
Paul F. Dibley
Mark Djekovic
Mary Germanski
Larry Keith Goulait
Robert Slobodan Grbic
James C. Hart
James A. Healey
Chad Matthew Hoover
Nicholas Orestes Kaltsounis
Alysia Michelle Lange
Ryan Patrick McCarthy
Gregory Richard Miller
Peter Koch Milne
Tomohiko Oshio
Mutaz Anwar Rabadi
Paul A. Reading
Chris Marcus Smits
David Eric Smyth
Christopher Alan Stearns
Nathan Alan Tison
Lisa Marie Van Wynsberghe
Gee-Yuen Yung

Systems Engineering
Mohammed Hassan Elzhenni
David Earl Hall
Edward J. Maurer
Hetal M. Patel
Jessica Lee Yeager

ABOUT HONORS AND AWARDS

On the occasion of commencement, the university offers special recognition to those students who have attained outstanding levels of academic achievement and service.

Students who have demonstrated superior performance in the courses of their major subject area are awarded Departmental Honors. The faculty of the School of Engineering and Computer Science has elected several graduating seniors to receive Departmental Honors in engineering or in computer science. They are identified by red cords worn over their academic regalia.

The University Senate of Oakland University has established three levels of University Honors to recognize superior academic performance in all subject areas. Students who have completed at least 62 credits of study at Oakland University and whose cumulative grade point average ranges between 3.60 and 3.74 graduate cum laude. A student who has earned a grade point average between 3.75 and 3.89 graduates magna cum laude. Students attaining the highest academic level, grade point averages of 3.90, and above, graduate summa cum laude. Students who have earned University Honors wear gold cords over their academic regalia.

Additionally, the faculty of the School of Engineering and Computer Science has created several awards to honor graduating seniors who have distinguished themselves by truly outstanding scholarship in engineering studies, by outstanding technical development toward the engineering profession and by exemplary service to the school. These special awards are marked by the presentation of certificates and prizes to the recipients and also by the engraving of the recipients' names on permanent commemorative plaques in Dodge Hall of Engineering.

Membership in the Golden Key National Honor Society, an academic honors organization, is indicated by a purple cord with white tassels worn over academic regalia. The faculty extends most hearty congratulations to all of the students receiving honors and awards at this commencement exercise.

Membership in Tau Beta Pi, the National Engineering Honor Society, is indicated by a brown cord worn over academic regalia.

Membership in Eta Kappa Nu, the National Electrical Engineering Honor Society, is indicated by a royal blue cord worn over academic regalia.

HONORS AWARDED
December 1995

UNIVERSITY HONORS

Summa Cum Laude

Donald Allan Misson

Magna Cum Laude

Kimberly K. Klaus
Steven Jeffrey Moss

Cum Laude

John Joseph Headley
Bernd Alan Herrmann
Lisa Marie Olson
David Kent Stiles

DEPARTMENTAL HONORS

Electrical Engineering

Bernd Alan Herrmann
Donald Allan Misson

Mechanical Engineering

John Joseph Headley
Kimberly K. Klaus
Steven Jeffrey Moss
Lisa Marie Olson
David Kent Stiles

HONORS AWARDED
April 1996

UNIVERSITY HONORS

Summa Cum Laude

Mohammed Hassan Elzhenni
Tomohiko Oshio

Magna Cum Laude

Christopher C. Strauss

Cum Laude

James S. Hurst
Joseph George Machak
Gregory Richard Miller
Nathan Alan Tison

DEPARTMENTAL HONORS

Computer Science

James S. Hurst
Christopher C. Strauss
Angelina Ventura

Computer Engineering

Amro M. Khorshid

Electrical Engineering

Daniel John Grimske
Michael D. Iveson
Holly Ann Jones
Joseph George Machak
Christopher Scott Tuttle
Angelina Ventura

Mechanical Engineering

Tomohiko Oshio
Nathan Alan Tison
Gregory Richard Miller

Engineering Chemistry

Holly Ann Jones

Systems Engineering

Mohammed Hassan Elzhenni

UNIVERSITY AWARDS

ALFRED G. AND MATILDA R. WILSON AWARDS

The Alfred G. and Matilda R. Wilson Awards are presented annually to an Oakland University senior man and woman, respectively, who have made outstanding contributions as scholars, leaders, and responsible citizens to the Oakland University community. The 1996 recipient of the Alfred G. Wilson Award is a senior in the School of Engineering and Computer Science:

David Eric Smyth

SPECIAL AWARDS

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Award for Exceptional Achievement

Awarded annually to the graduating senior in the School of Engineering and Computer Science who, in the judgment of the faculty, has achieved the highest level of scholastic excellence.

Donald Allan Misson
Tomohiko Oshio

Award for Academic Achievement

Awarded annually to the graduating senior in the School of Engineering and Computer Science who, in the judgment of the faculty, has demonstrated an outstanding level of academic performance.

Mohammed Hassan Elzhenni

Award for Service

Awarded annually to the graduating senior in the School of Engineering and Computer Science who, in the judgment of the faculty, has rendered the greatest service to the School.

David Eric Smyth

Award for Professional Development

Awarded annually to the graduating senior in the School of Engineering and Computer Science who, in the judgment of the faculty, has demonstrated the greatest technical development in his/her studies and shown an outstanding measure of individual initiative in connection with a project.

Laurie Lynn Williams

BOARD OF VISITORS

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Siemens Automotive

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General Dynamics Land Systems Division

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Stephan Sharf
SICA

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Masco Tech Technical Services

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Detroit Diesel Corporation

Thomas H. Vos
TRW Vehicle Safety Systems, Inc.

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Oakland University's School of Engineering and Computer Science offers instruction leading to the Bachelor of Science in Engineering (B.S.E.); with majors in computer, electrical, mechanical and systems engineering and the Bachelor of Science (B.S.), with a major in computer science. Programs leading to the Bachelor of Science degree in engineering chemistry and engineering physics are offered jointly with Oakland's College of Arts and Sciences. The school also offers graduate programs leading to masters and doctoral degrees.

The school consists of three departments and the Center for Robotics and Advanced Automation (CRAA). The school is of medium size, with 1,200 undergraduate and graduate students and features an outstanding faculty - dedicated to classroom instruction of the highest quality as well as to research in their fields of specialization. Its size permits close student/faculty interaction, small classes and individualized attention.

Undergraduate engineering and computer science programs at Oakland University place an emphasis on a well-rounded education characterized by:

- A broad-based perspective of engineering and computer science that stresses creative thinking - preparation for solving complex technological problems.
- Relevant laboratory instruction as an integral part of course work - giving a balance between theory and practice.
- Integration of computer instruction and utilization throughout the curricula.
- Design and creative development as a central activity of engineering and computer science.
- A social and humanistic perspective through a comprehensive program of general education.

All academic programs at Oakland University are accredited by the North Central Association of Colleges and Schools (NCA). Besides the NCA accreditation, the undergraduate programs in computer, electrical, mechanical and systems engineering are accredited by the Accreditation Board for Engineering and Technology (ABET), and the computer science program by the Computing Sciences Accreditation Board (CSAB).

Graduate programs at the masters level are offered in electrical and computer engineering, mechanical engineering, systems engineering, and computer science and engineering.

The Doctor of Philosophy degree is offered in systems engineering. The goal of the doctoral program is to prepare engineers who have a broad competence that crosses the boundaries of traditional engineering disciplines and who are capable of dealing with complex large-scale problems.

OAKLAND UNIVERSITY BOARD OF TRUSTEES

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