# 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 5, 1992

10 a.m.

Howard C. Baldwin Memorial Pavilion

Oakland University

Rochester, Michigan

# ORDER OF CEREMONY

**Processional**
Richard E. Haskell, *Marshal*
Ronald J. Srodawa, *Deputy Marshal*
Hoda Abdel-Aty-Zohdy, *Deputy Marshal*

**Welcome**
Howard R. Witt
*Dean, School of Engineering and Computer Science*

**Commencement Address**
Kenneth J. Oscar
*Deputy Commander for Research, Development and Engineering*
Commander, U.S. Army, TACOM

**Presentation of Honors**

**Presentation of Special Awards**

**Awarding of Degrees**
Sandra Packard, *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**
Yat-Chung Tang, *Graduating Senior*

**Alumni Welcome**
James B. Getchell, *B.S., 1967*
*Reliability Manager for Corvette, General Motors Corporation*

**Valediction**
Sandra Packard

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

**Reception**
*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 participates 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, the medieval scholar clothed himself 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 doctoral degree on his 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 1992

## DOCTOR OF PHILOSOPHY

### Systems Engineering

Bogdan Adamczyk
Dissertation: *Computer-aided System Diagnostics Using Intergrated Estimation and Neural Computations*

Slawomir Tadeusz Fryska
Dissertation: *Analytical Characterization of Chaotic Orbits in Non-Linear Mechanical and Electrical Systems*

Laszlo Miklos Hideg
Dissertation: *Stability of Learning Control Systems*

## MASTER OF SCIENCE

### Computer Science and Engineering

Serena F. Chen
Gary E. Jakobcic
James Michael Johncox
Gita Krishnan
Robert M. Leptich
Rama Somanatha Sastri Madugula
Padma Kumar
Sivaraman Ramaswami
David Todd Rivett
Nina Kirit Shah
K. R. Suresh
Andrew Yee

### Electrical and Computer Engineering

Bruce Edward Brendle, Jr.
Anthony Dwanye Cooprider
James R. McKinley
Todd Denson Smith
James Edward Tarchinski
David Paul Tasky
Gang Yang

### Mechanical Engineering

Robert George Blatchford
Lawrence David Burr
George R. Chene, Jr.
Jon Paul Gleeson

### Systems Engineering

Todd Andrew Belvo
William John Boyke
Alan Thomas Budyta
Mark Joseph Chernowsky
Ronald Patrick David
Glenn E. Stahl
Donald Avon Warbritton III

## BACHELOR OF SCIENCE

### Computer Science

Steven William Baker
Dean Thomas Boyd
Craig Alan Jackson
Donald James Knisley
Mate Jozo Letica
Ronald J. Potempski

## BACHELOR OF SCIENCE IN ENGINEERING

### Computer Engineering

Daniel C. Champoux
Khaled A. Elrawi
Stephen Conrad Gordon
Paul Anthony Jozefowicz
Marc Frederick Junod
Donald C. Montney
George Vardakis

**Electrical Engineering**

David Scott Bowden
Keith Alan Drittler
Nicolas Philippe Elriachi
Lisa Ann Gronowski
Michelle Geralyn Holmes
Paul Anthony Jozefowicz
Brooks Lee Lamb
Pietro Salvatore Locricchio
Scott Duncan MacFarlane
Joseph Lawrence Richards
Richard Raymond Tuttle, Jr.

**Mechanical Engineering**

Tracey Lynn Anton
Steven Martin Bacik
William Walter Barsuhn
Dennis Joseph Fiore
Christopher John Kobus
Christopher Sean Koprowicz
Jeffrey Bruce Manhire
Kurt Earl Marcath
Kirk Gerard Pesta
Laureen Ann Ulfig
Mark Richard Vogel
Carole L. Wawa
Ty Eric Wedekind
Thomas Joseph Zeleznik
Jeffrey Joseph Zielinski

**Systems Engineering**

David Scott Bowden
Shayne Wilson

# CANDIDATES FOR DEGREES
# April 1993

## DOCTOR OF PHILOSOPHY

### Systems Engineering

Wai Man Janet Chan
Dissertation: *Design and Kinematic Control for a Robotic Manipulator with High Redundancy*

## MASTER OF SCIENCE

### Computer Science and Engineering

Thomas R. Celusnak
Steven Scott Foster
Terrence Paul Fries
Craig A. Hodgkin
Sonja Yvette Hunter
Suneel Joshi
Cathleen Janet Learmont
Donald Masselli
James Matthew Pechacek
Abdallah Fawzi Shanti
Lalit Kumari Taneja

### Electrical and Computer Engineering

Jun Ao
Edwin Thomas Carlen
Vasil Germanski
David William Grant
Jeffrey Scott Johnson
Dandan Liu
Herman McKenzie, Jr.
Kevin Michael Pearce
Thai Quoc Pham
Paul Charles Richardson
Steven Joseph Roskowski
Salwa Naguib Sidrak
Harsh Girish Tank
Jeffrey Carlton Thorsen

### Mechanical Engineering

Michelle Mary Dumeah
Jie Gu
Raid G. Hadi
Charles Joseph Lemont, Jr.
James F. Reichenbach
Kadry William Rizk
Philip Stanley Szuba
Robert L. Trapp
Eric Alan Watterworth
Xiaoping Xu

### Systems Engineering

Randy A. Graca
Michael Robert Griffin
Gordon Wilbur Jackson
Karen Naim Kheir
Stephen Charles Pillen

### Systems and Industrial Engineering

Daniel M. McCoy

## BACHELOR OF SCIENCE

### Computer Science

Kenneth John Bergler
Fenghua Cao
John J. Hall
William Howard Hamann, Jr.
Tian Jiang
Amy Susan Kosakowski
Randy Gordon Kramer
Michael J. Matz
William A. Russell-Proctor
Brian Joseph Schwartz
Denise B. Selby
Manpreet Singh

### Engineering Chemistry

Jeffrey David Harris
Eremias G. Mamo
Barbara L. Snider
Gail Marie Wilcox

## BACHELOR OF SCIENCE IN ENGINEERING

### Computer Engineering

William David Grech
Shawn K. Haase
John D. Klaus
Dale R. Maline
Dennis Douglas Schnabel, Jr.
Stephen LeRoy Snyder
Phillip Edward Wolschlager

### Electrical Engineering

John Douglas Ball, Jr.
Leslie John Burley, Jr.
Jennifer Chen
Walid M. Elsady
John Wesley Finta
Steven L. Frecker
Shawn K. Haase
John D. Klaus
David Andrew La Fave
Michael A. Lawler
Leonard Joseph Leshinsky, Jr.
Keith Matthew Little
Robert Lawrence Miller
Philip George Stopke
Yat-Chung Tang
Kurt William Zaiser

### Mechanical Engineering

Kenneth Alan Andersen
Richard Thomas Austreng
Jeff Alan Baumbach
Gregory Richard Bendzinski
Keith A. Bobincheck
Hans Martin Brueggeman
Stephen Daniel Buss
Michael Bradley Clor
Jayasing Shivasirao Desai
Steven James Gage
Rudolf Gerich
John J. Hall
David Lee Holbrook
Barbara Jean Holland
Joseph Francis Humphreys, Jr.
Rory M. Johnson
Thomas Ronald Jones
Matthew Michael Karaba
Rebecca Rose Kostiuk
Paul Steven Lambertson
Christine A. Mennucci
David T. Moore
Kenneth Leon Nowaczyk
Michael Allan Pircer
Scott Eddie Smith
John Charles Stallmann
Cynthia Ann Stevens
Goran Stojanovski
Florence Elaine Townsend
Gordon Rodney Tullock
Paul Martin Van Rooyen
Nicole Marie Waters
Kenneth Andrew Wolf

### Systems Engineering

David Michael Janas

# 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.

# HONORS AWARDED
# December 1992

## UNIVERSITY HONORS

***Summa Cum Laude***
Michelle Geralyn Holmes

***Cum Laude***
Donald C. Montney

## SCHOOL HONORS

**Computer Engineering**
Donald C. Montney
Paul Anthony Jozefowicz

**Computer Science**
Craig Alan Jackson
Steven William Baker
Ronald J. Potempski

**Electrical Engineering**
Michelle Geralyn Holmes
Paul Anthony Jozefowicz
Scott Duncan MacFarlane

**Mechanical Engineering**
Thomas Joseph Zeleznik
Christopher John Kobus
Jeffrey Bruce Manhire

# HONORS AWARDED
# April 1993

## UNIVERSITY HONORS

***Summa Cum Laude***

Yat-Chung Tang

***Magna Cum Laude***

Amy Susan Kosakowski

***Cum Laude***

Denise B. Selby
John Charles Stallmann

## SCHOOL HONORS

**Computer Engineering**

Shawn K. Haase
John D. Klaus
Dennis Douglas Schnabel, Jr.
Philip Edward Wolschlager

**Computer Science**

Amy Susan Kosakowski
Randy Gordon Kramer
Denise B. Selby

**Electrical Engineering**

David Andrew La Fave
Yat-Chung Tang

**Engineering Chemistry**

Barbara L. Snider

**Mechanical Engineering**

Hans Martin Brueggeman
Rory M. Johnson
John Charles Stallman
Nicole Marie Waters
Kenneth Andrew Wolf

These lists were current at the time of printing this commencement program. Changes occurring too late to be included are reflected on the diplomas and transcripts of graduates.

# 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.

Yat-Chung Tang

### 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.

Michelle Geralyn Holmes

### Award for Service

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

Dennis Douglas Schnabel, Jr.

### 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.

Ty Eric Wedekind

# 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.

# BOARD OF VISITORS

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Consultant

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GTE Products Corporation

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Walbro Corporation

Ronald R. Boltz
Chrysler Corporation

Henry R. Carabelli
Michigan Bell

Gerald DeClaire
Rockwell International

Herbert H. Dobbs, Ph.D.
Consultant

Lamont Eltinge, Ph.D.
Consultant

Robert W. Hildebrand
Rockwell International Auto

Alfred F. Houchens, Ph.D.
GM Technical Center

Sidney D. Jeffe
Schlegel Corporation

William L. Kath
Ford Motor Company

Ronald P. Knockeart
Siemens Automotive

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General Dynamics Services Company

Ronald L. McIntyre
Detroit Edison

Kenneth Oscar, Ph.D.
U.S. Army TACOM

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