

BIOGRAPHICAL SKETCH

PAUL Y. OH

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A. Professional Preparation

1999	Columbia University, New York	Mechanical Engineering	Ph.D.
1995	Columbia University, New York	Mechanical Engineering	M. Phil
1992	Seoul National University, Korea	Mechanical Engineering	M.Sc
1989	McGill University, Canada	Mechanical Engineering	B. Eng. (Honors)

B. Appointments and Work Experience

2000-Present	Drexel University – Assistant Professor Mechanical Engineering Department
1999-2000	Columbia University – Adjunct Professor Mechanical Engineering Department
1998-2000	Bell Atlantic Science and Technology, White Plains NY- Software Developer
1992-1993	Central International Law Firm, Seoul Korea - Engineering Patent Consultant
1990-1992	Daewoo Heavy Industries, Seoul, Korea - Embedded Controllers Engineer
1989	CAE Electronics Ltd., Montreal, Canada - Control Systems Engineer

C. Fellowships and Awards

2004	• NSF CAREER Award
2003	• ONR/ASEE Naval Research Lab <i>Summer Faculty Fellowship</i>
	• U.S. FIRST Robotics Competition, <i>Judges Award</i>
2002	• ASME Region III <i>Student Chapter Award</i>
	• ASME International <i>Diversity Action Grant</i>
	• NASA/ASEE Jet Propulsion Lab, <i>Summer Faculty Fellowship</i>
	• U.S. FIRST Robotics Competition, <i>Top Philadelphia Team Award</i>
	• Drexel University Baiada Entrepreneurship Center <i>Senior Design Prize</i> , 2002
2001	• ASME International Board of Governors <i>Certificate of Appreciation</i> , 2001
	• Philadelphia Port of Technology, <i>\$1000 Entrepreneurship in Technology Prize</i> for “Low Elevation Aerial Photography” project, 2001
	• U.S. FIRST Robotics Competition <i>Top Rookie Team Award</i> , 2001
1999	• Columbia University, Computer Science, <i>Graduate Research Assistantship</i> , 1999
1998	• National Science Foundation <i>Travel Scholarship</i> , (awarded to 10 students presenting a paper at the <i>IEEE International Conference on Robotics and Automation in Leuven, Belgium</i>), 1998
Before 1998	• Columbia University, <i>Graduate Teaching Assistantship</i> , Mechanical Engineering, 1994-1998
	• Canadian Ministry of Education <i>Governor's Fellowship</i> , (<i>Graduate fellowship awarded to encourage scientific and cultural exchanges between Canada and Asia</i>), 1989-1992
	• Daewoo Heavy Industries <i>Graduate Research Fellowship</i> , 1990-1992
	• McGill University, McConnell Engineering Teaching Assistant Award, 1986-1989

D. Professional Services and Activities

Chairperson	IEEE Robotics and Automation Society – Technical Committee for Aerial Robotics
Technical Committees and Session Chairing	2001-2004: IEEE International Conference on Robotics and Automation (ICRA)
	2002-2003 IEEE International Conference on Intelligent Robots and Systems (IROS)
Journal Reviewer	IEEE Trans. Robotics and Automation, IEEE Trans. Systems, Man and Cybernetics
ASME Faculty Advisor	2001-2004 Drexel University Student Chapter

E. Training Activities From Years 2001 to 2004:

Graduate Research Training (6 students)

Ph.D. (5) Rares Stanciu, William Green, Todd Danko, Michael Joyce, Justin Gallagher
 Masters (1) Bharat Shah (graduated Jan. 2002)

Undergraduate Research Training (6 students):

Name	Research Area Supervised	Dates
Chris Zubrzycki	Robot soccer competition	09/2000 - 06/2001
Yanni Giannopoulos	Controlling motors over the Internet	01/2002 - 06/2002
Ian White	Injection molding	06/2001 - 06/2002
Pragny Choksi	Biped robotics	09/2002 - 09/2003
Josh Caparella	Aerial robotics	06/2003 - 09/2003
Keith Sevcik	Aerial robotics	09/2002 – Pending

As of June 2004, Paul Oh has advised **23** students on their **Senior Design** Projects and **14** students for **Freshmen Design** Projects. Two projects won the \$1000 Prize in the Baiada Entrepreneurship Contest. Also *two refereed conference papers*, stemming from the projects were published.

F. Courses Taught (in past 3 years)

Course Number and Name	Highlights
1. MEM 639 Real-Time Microcomputer Control I	Multi-disciplined, hands-on course, 5 labs and Project Average Course Rating: 4.5 out of 5.0 Average Rating of Instructor: 4.9 out of 5.0
2. MEM 640 Real-Time Microcomputer Control II	Multi-disciplined, hands-on course, 4 labs and Project Average Course Rating: 4.4 out of 5.0 Average Rating of Instructor: 4.5 out of 5.0
3. MEM 800: GUI-Based Control	Emerging technologies and multi-disciplined Average Course Rating: 4.8 out of 5.0 Average Rating of Instructor: 5.0 out of 5.0
4. MEM 351: Dynamic Systems Lab	Dynamics and controls lab with apx. 50 students/term Average Course Rating: 4.5 out of 5.0 Average Rating of Instructor: 4.5 out of 5.0

Examples of Innovations in Teaching and Training: • Integrating entrepreneurship with design courses. Two teams have won the *Philadelphia Port of Technology* \$1000 award for entrepreneurship. • Fabricated electronics kit for computer interfacing instruction. Used by 50 universities worldwide. • Students maintain on-line journal and publish projects on the web.

G. K-12 Activities and Efforts to Attract Under-represented Minorities

US FIRST Robotics Contest (2001-2004)	Advised Bok Technical High School (Philadelphia inner-city). Team won Top Rookie Team Award in 2001 and Judges Award in 2003.
Diversity Action Grant (2003 and 2004)	Created 20 posters celebrating under-represented minority aviation pioneers. Posters were displayed during Engineers Week and Wright Brothers Centennial to inspire high school students to engineering.
Workshop (2004)	ASME-sponsored 4-week “Engineering Scholarship Applications Tutorial” program. Outstanding under-represented minority engineering students tutored inner-city high school students in how to apply for engineering scholarships.

H. Collaborators from 2000 to 2004

Co-authors in past: Peter K. Allen (Columbia University), Jong Soo Lee (Inha University), Sherri Jurgens, Ray Zhang and Charles Mode (all at Drexel). Research Collaborators: Larry Matthies (NASA JPL), Alan Schultz (Naval Research Lab), Mark Centkowsky (Innovision Optics), In-So Kweon (KAIST) and Gary Cruz (Honeywell).