ECE Advisory Board December 12, 2014

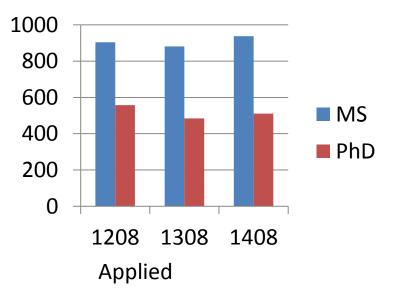
PROFESSOR ANKUR SRIVASTAVA ASSOCIATE CHAIR OF GRADUATE STUDIES AND RESEARCH

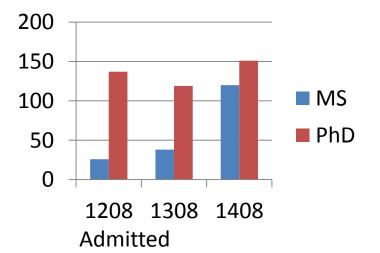


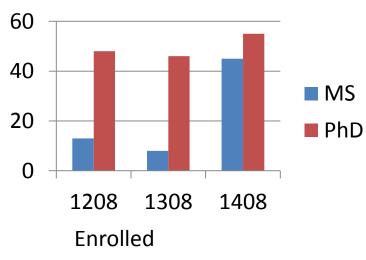


A. JAMES CLARK School of engineering

Admissions Statistics

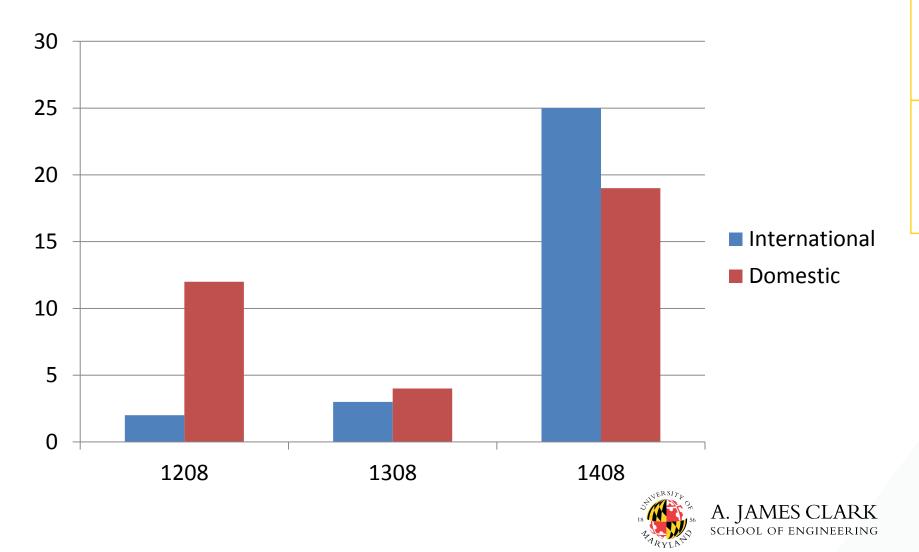








Increase in MS Students



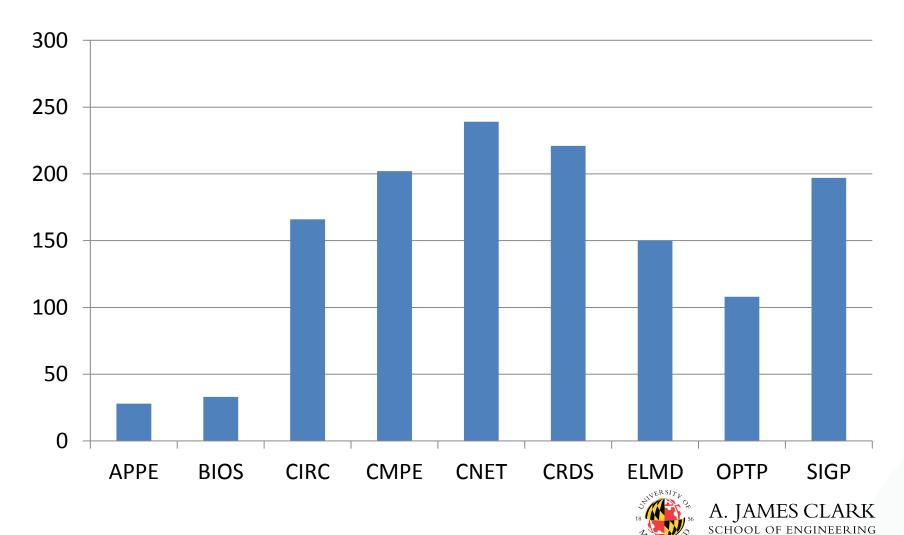
Fall 2014

	MS	PhD	Total
Applied	937	511	1448
Admitted	120	151	271
Enrolled	45	55	100

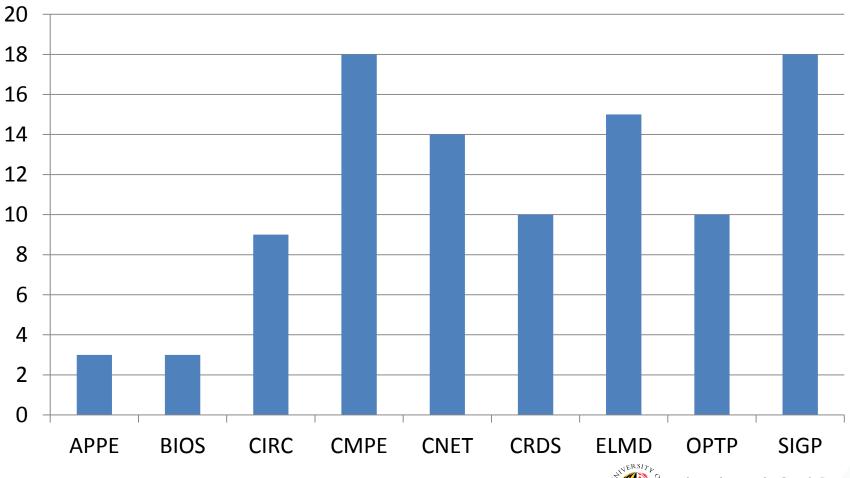
<u>Diversity</u> Women: 11 (6 MS, 5 PhD) Minority: 1 University Fellow (African American) Domestic: 25 (19 MS, 6 PhD)



Applicants by Research Area



Enrolled by Research Area





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Financial Support Models

GSR	GST	GTA	GTA/GRA	GRA	MS
\$15,000 fellowship	\$15,000 fellowship	\$17,562 GTA	\$8,781 half- GTA	\$17,562 GRA	\$8,781 half- GTA
\$8,781 half- GRA	\$8,781 half- GTA		\$8,781 half- GRA		\$10,000 corporate scholarship or \$5,000 dept. scholarship
\$5,854 half- GRA in summer	\$5,000 optional summer support	\$5,000 optional summer support	\$5,854 half- GRA in summer	\$11,708 GRA in summer	
\$29 <i>,</i> 635	\$28,781	\$22,562	\$23,416	\$29,270	\$13,781- 18,781

GRA = graduate research assistantship, GTA = graduate teaching assistantship



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Financial Offers

GSR	GST	GTA	GTA/GRA	GRA	MS	Total
7/22	12/41	12/41	1/2	0/1	4/8	36/115

Offers accepted/total offers

- Only 7 (2 accepted) offers with matching support in 1308.
- MS Scholarships to increase enrollment US MS students, particularly BS/MS.
- Leverage use of outside gifts: Jimmy Lin Scholarships, Leidos MS Scholarship, Northrop Grumman MS Scholarships, Southeast University Scholarship.



BS/MS Program Initiatives

- Targeted recruitment of students with 3.8 GPA or higher.
- Regular information sessions drawing 30 or more participants (Oct. 8 & Nov. 4, 2013; Oct. 28 & Nov. 12, 2014).
- Departmental and corporate-sponsored (Northrop Grumman, Leidos) scholarships.
- Approximately 50% increase in enrollment in BS/MS Program over the last few years.

Data-driven Mentorship

- <u>PhD Activity Survey</u> to monitor progress.
- Identify first year students in need of mentorship.
- Award teaching assistantships to deserving candidates.
- Ask all PhD students to complete survey to get a complete picture of typical progression towards degree.



PhD Activity Survey Sample Questions

If you have not passed the **written qualifying exam**, please describe the efforts you have made thus far to pass.

- I did the example exams available to help me know which part I need to spend more time to improve, and start to refresh myself about the relevant knowledge.
- I am reviewing the mathematical knowledge for the written qualifying exams everyday, including the Linear Algebra and Probability. Also the courses this semester also help me to review the Signal Processing knowledge, which is also required for the written exam.

Do you have a **research advisor**? If no, please describe the efforts you made thus far to identify a research advisor.

- I have talked with Professor Rama Chellappa about my interest to join his group, and have participated in his group meeting to follow his projects' progress. I also take his image understanding class, so that I can have more opportunity to talk with him.
- Currently, I am working in the DSPCAD group, under the guidance of Professor Shuvra Bhattacharyya.

Have you submitted any **conference papers** this semester? Please state the information about the conference submissions.

- AUTHORS, "Biomimetic Algorithms for Coordinated Motion: Theory and Implementation", IEEE International Conference on Robotics and Automation (ICRA), 26-30th May, 2015, Seattle, Washington, USA. (submitted)
- AUTHORS, Gaussian MIMO Wiretap Channel under Receiver Side Power Constraints, 52nd Annual Allerton Conference on Communications, Control and Computing, Monticello, IL, October 2014



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Assistantships Fall 2014

Department Allotment

- 50 lines, 21 used to recruit new students.
- 90 applicants for GTA positions.

Strategic Use of Limited Resources

- 67 students supported.
- 39 applicants were picked up as GRAs.
- 12 students not supported (low GPA, MS).

Increase in Enrollment in Undergrad and Grad Programs

- Staffed more sections than before without requesting additional lines.
- Increase of 11 sections in 300-level courses and below.
- Increase in enrollment in graduate core courses, e.g. ENEE646 13 to 43 students.



Hobsons ApplyYourself and AppReview

- New graduate admissions and review systems.
- ECE developed MEGS in 2001, which was subsequently used university-wide for the submission and review of graduate applications until now.
- Spring 2015 is first semester the university will use Hobsons products for graduate admissions.



Thank You

